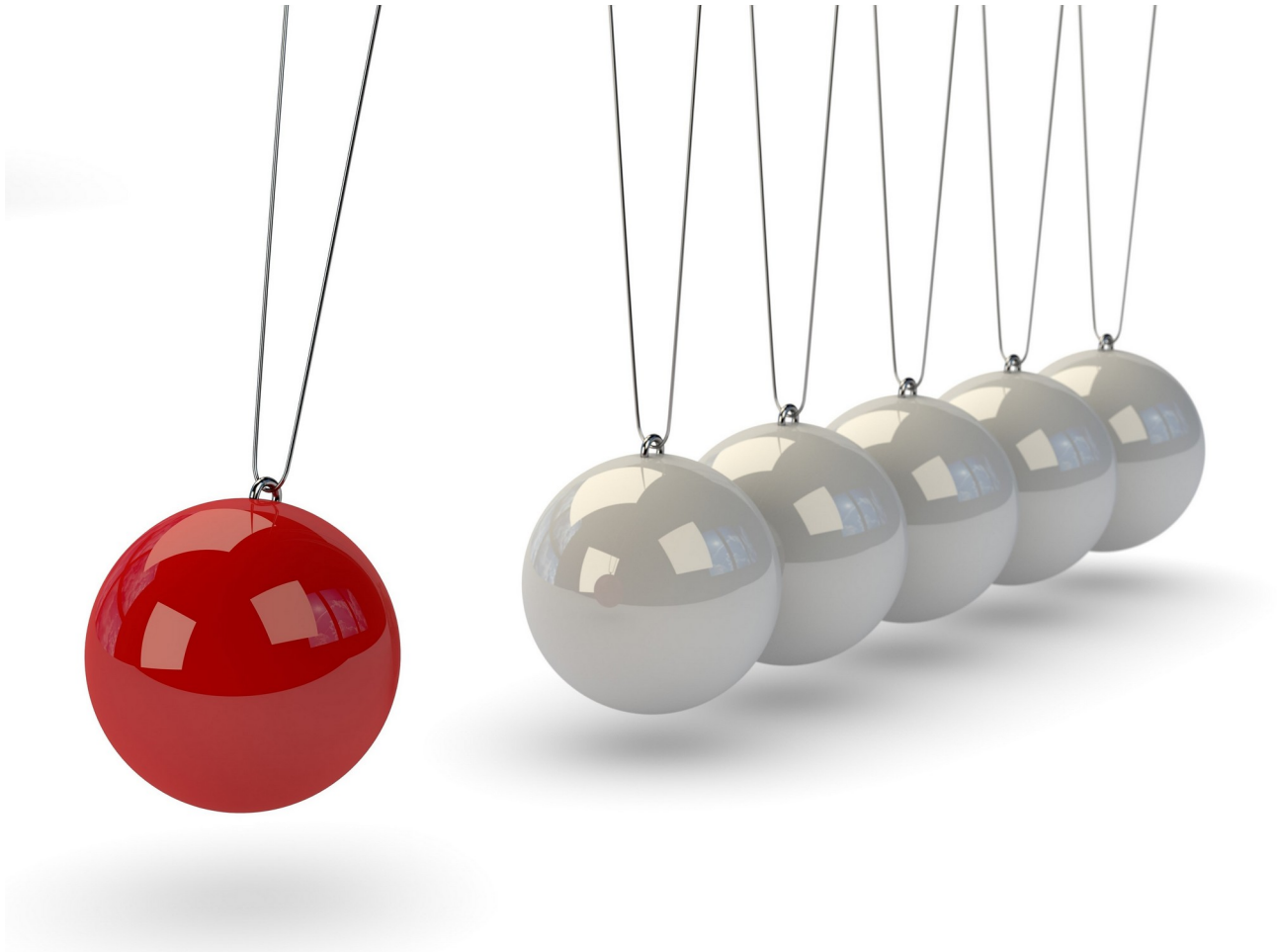


magtivio

Product Catalog

MagSiMUS
MagSi





Quality Standards

magtivio works according to their own QMS (Quality Management System). This quality system is continuously maintained and improved through the use of a quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management reviews.

magtivio will exceed its customers' expectations by striving without reserve for unsurpassed product quality, reliability, and patient safety through effective, agile and compliant processes.

magtivio will continuously adapt its quality management systems, comply with all applicable regulatory requirements, and deliver excellence to customers through our products, processes, services and relationships.



Introduction

Founded in 2018, magtivio BV took over all activities from MagnaMedics Diagnostics BV. Magtivio BV is your valued partner for routine and R&D laboratories and in-vitro diagnostics manufacturers. With a focus on biotechnology, magtivio BV develops and commercializes a continuously expanding line of magnetic separation solutions.

Based on years of experience we have a thorough understanding of the biotechnology area and especially its separation challenges. Our added value lies in magtivio`s proven ability to supply high quality and reliable solutions with flexibility to meet the varied needs you might have. You can rely on our proprietary technology, standardized production methods and the expertise of our enthusiastic and committed team. We are proud to solve your separation challenges with our simple solutions.... *Move to Simplicity.*

"Simplicity is when someone takes care of the details"

Oliver Reichenstein

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1 MagSiMUS Products for LC-MS/HPLC Sample Preparation



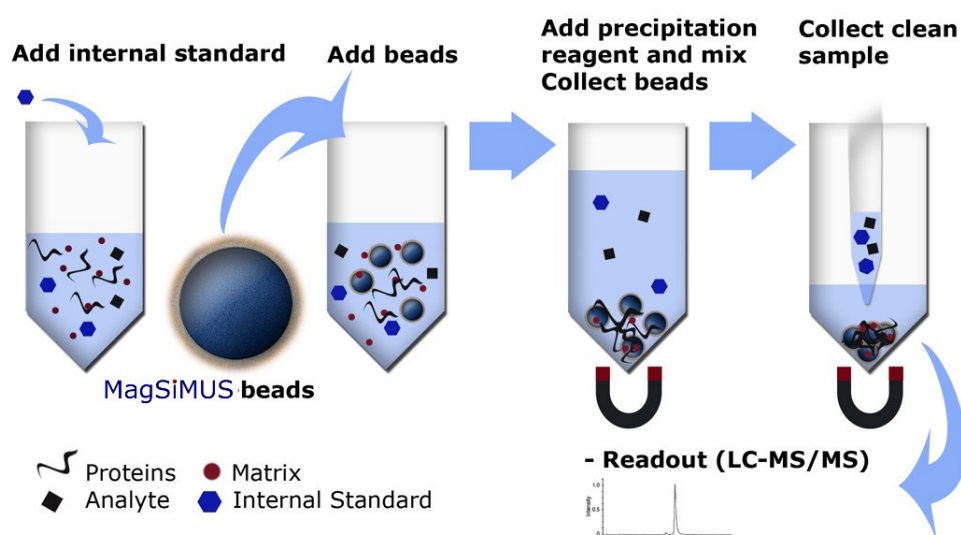
Remove the Haystack... To Find the Needle

1.1 The MagSiMUS Principle

More and more (U)HPLC and Mass Spectrometry technologies replace the less sensitive and often more unspecific immunoassays for the detection and analysis of increasingly complex target analytes in clinical diagnostics and screening laboratories. To reduce matrix effects, a good sample preparation method upfront of these analyses is often required to exclude interfering compounds – especially proteins. All commonly used methods – Protein Precipitation (PP), Solid Phase Extraction (SPE) and Liquid Liquid Extraction (LLE) – have specific disadvantages: difficult to automate, time-consuming and/or economically unfavorable.

MagSiMUS magnetic bead-based biological sample preparation kits are intended for protein depletion and removal of other interfering compounds from biological samples like whole blood, serum, plasma or urine. They work according to the unique and innovative negative selection technology, which removes the contaminants and leaves the target molecules in the supernatant.

For LC-MS, an internal standard, typically dissolved in dilution reagent, is added to a clinical sample. This ensures that the analyte itself and the internal standard undergo one and the same cleanup route. The **MagSiMUS** magnetic bead (particle) mix is then added and suspended homogeneously into the clinical sample. Proteins and larger peptides are then precipitated towards the beads' surface by addition of a protein precipitating reagent. The magnetic bead/protein precipitate is subsequently attracted by a magnetic field with a suitable magnetic separator, leaving the target analyte in suspension. The supernatant is now clean and can be directly injected into the readout system (UHPLC, LC-MS/MS).



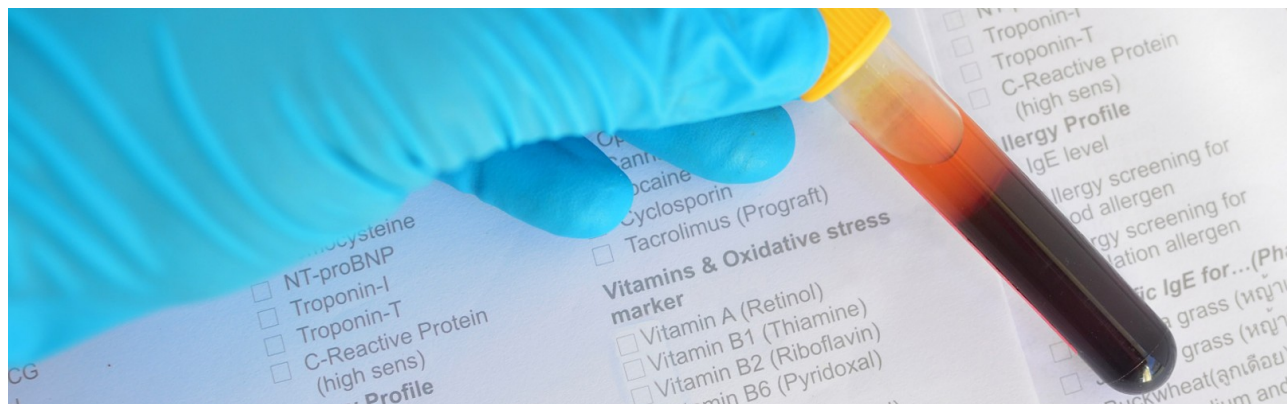
MagSiMUS technology uses flexible protocols, does not require centrifugation and is easy to automate for medium and high-throughput processing.

MagSiMUS methods are designed and optimized for the sample cleanup prior to the LC-MS/MS or (U)HPLC analysis of specific analytes. For more information on which **MagSiMUS** method to use for what analytes, contact our technical support department.

Make sure to use suitable Magnetic Separators for **Manual Use** or for **Automated Processing** in conjunction with **MagSiMUS** methods (see pages 27 and 28).

MagSiMUS features

- Reduced matrix effects in (U)HPLC and Mass Spectrometry
- Quick and complete sample preparation protocols, with short run times
- Easy to automate for medium and high throughputs
- Works with low sample volumes (down to 25 - 50 µL) so there is always cost-saving on reference materials
- No need for centrifugation or the application of positive or negative (air) pressure
- Many different **MagSiMUS** methods available in kit formats covering many different analytes.



1.2 Sample Preparation for Therapeutic Drug Monitoring (TDM) by (U)HPLC or LC-MS



MagSiMUS-TDM^{PREP}

MagSiMUS-TDM^{PREP} kits are designed for the cleanup of biological sample materials prior to LC-MS/MS or (U)HPLC analysis of e.g. immunosuppressants, antiepileptics, anticoagulants, neuroleptics, antimycotics, psychoactive drugs, antiarrhythmics, antibiotics and many other therapeutic drugs or substances.

MagSiMUS-TDM^{PREP} kits are available in two different magnetic bead type versions: Type I and Type II. Each magnetic bead mix type is optimized for the recovery of the analytes / panels of interest. The sample preparation method is the same for both bead mix types. Organic Precipitation Reagents (OPR I or OPR VI) for the selected method should be ordered separately, as well as Lysis Buffer for the whole blood protocol.

For more information and selection of the right magnetic bead type, contact our technical support department.

Art. No.	Product	Volume
MD03026	MagSiMUS-TDM^{PREP} Type I (contains Type I Particle Mix, ISDR A and ISDR B)	500 preps
MD03226	MagSiMUS-TDM^{PREP} Type II (contains Type II Particle Mix, ISDR A and ISDR B)	500 preps

Materials that can be ordered separately

MD71130	Organic Precipitation Reagent I (OPR I); for acetonitrile-based precipitation	100 mL
MD71335	Organic Precipitation Reagent VI (OPR VI); for methanol-based precipitation	100 mL
MD71630	Lysis Buffer for whole blood	100 mL
MDRE00110100	Internal Standard Dilution Reagent A (ISDR A) – for use with OPR I	100 mL
MD71530	Internal Standard Dilution Reagent B (ISDR B) – for use with OPR VI	100 mL



1.3 Sample Preparation for Toxicology and Drugs of Abuse (DoA) Screening



MagSiMUS-TOX^{PREP}

MagSiMUS-TOX^{PREP} kits are aimed at the cleanup of biological sample materials prior to LC-MS/MS or (U)HPLC analysis of e.g. benzodiazepines, metabolites, vitamins, drugs of abuse (amphetamines, cannabinoids, barbiturates, morphines), antidepressants and many other abusive drugs or substances.

MagSiMUS-TOX^{PREP} kits are available in two magnetic bead type versions: Type I and Type II. Each of these 2 different magnetic bead mix types is optimized for the recovery of the analyte of interest. The sample preparation method is the same for both bead mix types. Organic Precipitation Reagents (OPR I or OPR VI) for the selected method should be ordered separately, as well as Lysis Buffer for the whole blood protocol.

For more information and selection of the right magnetic bead type, contact our technical support department.

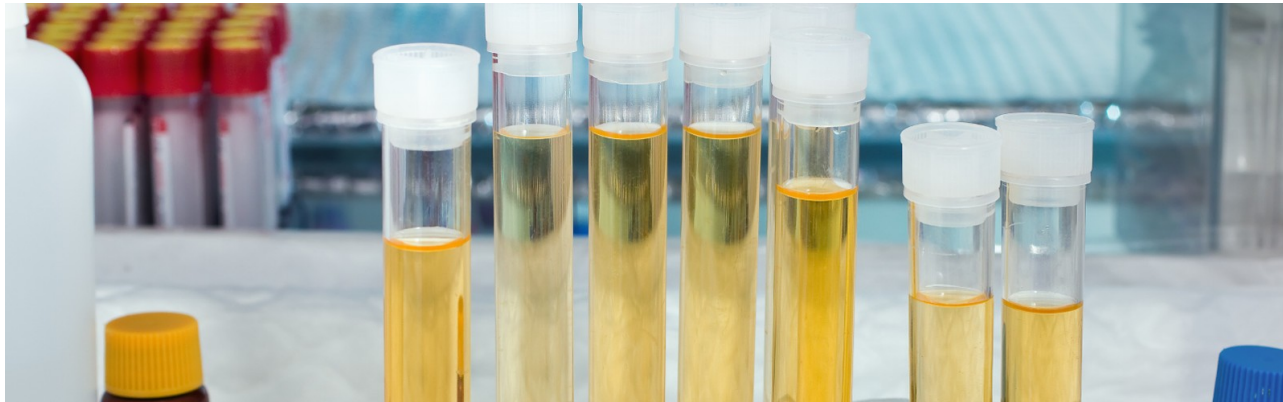
Art. No.	Product	Volume
MD03028	MagSiMUS-TOX^{PREP} Type I (contains Type I Particle Mix, ISDR A and ISDR B)	500 preps
MD03128	MagSiMUS-TOX^{PREP} Type II (contains Type II Particle Mix, ISDR A and ISDR B)	500 preps

Materials that can be ordered separately

MD71130	Organic Precipitation Reagent I (OPR I); for acetonitrile-based precipitation	100 mL
MD71335	Organic Precipitation Reagent VI (OPR VI); for methanol-based precipitation	100 mL
MD71630	Lysis Buffer for whole blood; for lysis of whole blood samples	100 mL
MD71730	Urine Stabilization Buffer; for stabilization of pH in urine samples	10 mL
MDRE00110100	Internal Standard Dilution Reagent A (ISDR A) – for use with OPR I	100 mL
MD71530	Internal Standard Dilution Reagent B (ISDR B) – for use with OPR VI	100 mL



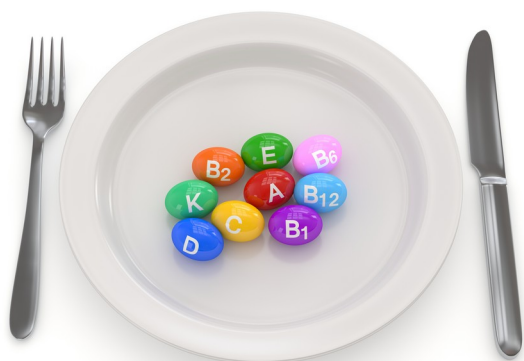
1.4 Accessory products for MagSiMUS Sample Preparation



Accessory reagents/buffers for the preparation and dilution of internal standards, precipitation and for sample lysis and stabilization steps in the **MagSiMUS** protocols. These reagents can be components of MagSiMUS kits, or should be ordered separately with MagSiMUS kits.

Art. No.	Product	Volume
MD71130	Organic Precipitation Reagent I (OPR I); for acetonitrile-based precipitation	100 mL
MD71335	Organic Precipitation Reagent VI (OPR VI); for methanol-based precipitation	100 mL
MDRE00110100	Internal Standard Dilution Reagent A (ISDR A) – for use with OPR I	100 mL
MD71530	Internal Standard Dilution Reagent B (ISDR B) – for use with OPR VI	100 mL
MD71630	Lysis Buffer for whole blood; for lysis of whole blood samples	100 mL
MD71730	Urine Stabilization Buffer; for stabilization of pH in urine samples	10 mL

MagSiMUS biological sample preparation kits need to be used in combination with magtivio manual or automated processing separators (see pages 27, 28).



Want more **MagSiMUS** biological sample preparation kits on the menu?

Yes you can.

Check our website regularly for the latest product updates and additions, and for Beta-tester programs

2 MagSi Products for Genomic applications

2.1 MagSi beads for DNA isolation and purification



MagSi beads can be used as solid support phase in DNA extraction and purification protocols by a simple bind/wash/elute principle. The products below are intended for own development of protocols and are suitable for various sample sources and buffer systems. MagSi beads for genomic applications are available with a range of physical properties and a silica or carboxyl modified surface.

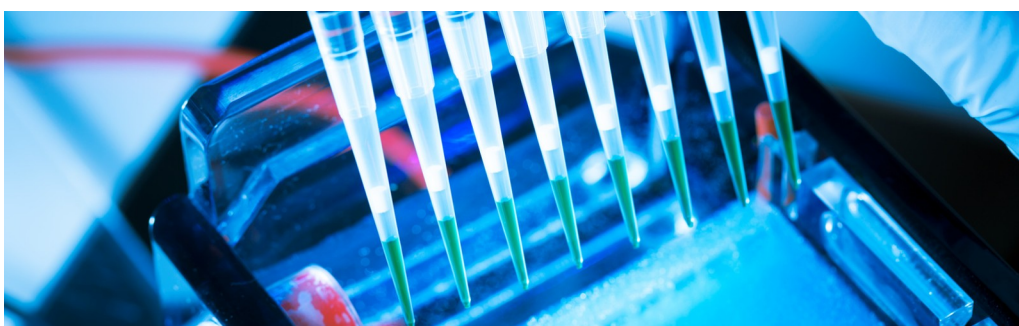
For more information and selection of the right magnetic bead type for your genomics separation challenge, consult the **Genomics Selection Guide**, or contact our technical support department.

For screening purposes, all different beads are offered together in the MagSi-DNA Trial kit.

MagSi-DNA Trial kit

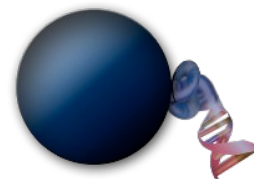
A complete set of 8 types of MagSi beads for genomic applications, offered in a single kit for trial purposes in development of new extraction and purification protocols or replacement in existing protocols. The kit includes silica beads MagSi-DNA mf, MagSi-DNA 600, MagSi-DNA allround, MagSi-DNA 3.0 and carboxylated beads MagSi-DNA mf COOH, MagSi-DNA 600 COOH, MagSi-DNA allround COOH, MagSi-DNA 3.0 COOH.

Art. No.	Product	Size	Volume
MD06028	MagSi-DNA Trial kit	300 nm, 600 nm, 1.2 µm and 3.0 µm	8 x 2 mL



2.1.1 Silica beads for genomic applications

Intended for nucleic acid isolation from various sources (blood, cells, bacteria etc.) for manual and automated work-flow.



MagSi-DNA 600

Magnetic silica beads with larger surface area and long suspension time.

Art. No.	Product	Conc.	Size	Volume
MD01016	MagSi-DNA 600	20 mg/mL	600 nm	2 mL
MD02016	MagSi-DNA 600	20 mg/mL	600 nm	10 mL
MD03016	MagSi-DNA 600	20 mg/mL	600 nm	100 mL

MagSi-DNA allround

Magnetic silica beads with fast separation and medium suspension time.

Art. No.	Product	Conc.	Size	Volume
MD01018	MagSi-DNA allround	20 mg/mL	1.2 µm	2 mL
MD02018	MagSi-DNA allround	20 mg/mL	1.2 µm	10 mL
MD03018	MagSi-DNA allround	20 mg/mL	1.2 µm	100 mL

MagSi-DNA 3.0

Magnetic silica beads with very fast separation and shorter suspension time.

Art. No.	Product	Conc.	Size	Volume
MD01022	MagSi-DNA 3.0	20 mg/mL	3.0 µm	2 mL
MD03022	MagSi-DNA 3.0	20 mg/mL	3.0 µm	10 mL
MD04022	MagSi-DNA 3.0	20 mg/mL	3.0 µm	100 mL

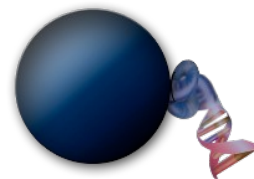
MagSi-DNA mf

Ferrimagnetic silica beads, developed for use in microfluidic and chip-based genomic setups but also well suited for tube or microplate setups.

Art. No.	Product	Size	Volume
MD0200010002	MagSi-DNA mf	300 nm	2 mL
MD0200010010	MagSi-DNA mf	300 nm	10 mL
MD0200010100	MagSi-DNA mf	300 nm	100 mL

2.1.2 Carboxylated Silica beads for genomic applications

Intended for nucleic acid isolation from various sources (blood, cells, bacteria etc.) for manual and automated work-flow. Under specific conditions, the carboxylated surface enables higher yield and purity from samples.



MagSi-DNA 600 COOH

Magnetic carboxylated silica beads with large surface area and long suspension time.

Art. No.	Product	Conc.	Size	Volume
MD01021	MagSi-DNA 600 COOH	20 mg/mL	600 nm	2 mL
MD02021	MagSi-DNA 600 COOH	20 mg/mL	600 nm	10 mL
MD03021	MagSi-DNA 600 COOH	20 mg/mL	600 nm	100 mL

MagSi-DNA allround COOH

Magnetic carboxylated silica beads with fast separation and medium suspension time.

Art. No.	Product	Conc.	Size	Volume
MD01020	MagSi-DNA allround COOH	20 mg/mL	1.2 µm	2 mL
MD02020	MagSi-DNA allround COOH	20 mg/mL	1.2 µm	10 mL
MD03020	MagSi-DNA allround COOH	20 mg/mL	1.2 µm	100 mL

MagSi-DNA 3.0 COOH

Magnetic silica beads with very fast separation and shorter suspension time.

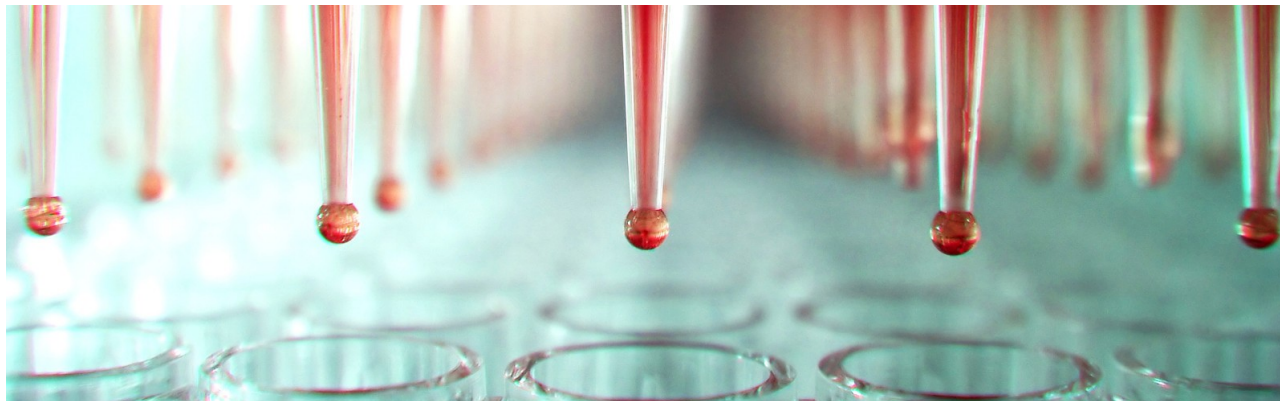
Art. No.	Product	Conc.	Size	Volume
MD01024	MagSi-DNA 3.0 COOH	20 mg/mL	3.0 µm	2 mL
MD03024	MagSi-DNA 3.0 COOH	20 mg/mL	3.0 µm	10 mL
MD04024	MagSi-DNA 3.0 COOH	20 mg/mL	3.0 µm	100 mL

MagSi-DNA mf COOH

Ferrimagnetic silica beads, developed for use in microfluidic and chip-based genomic setups but also well suited for tube or microplate setups.

Art. No.	Product	Size	Volume
MD0200040002	MagSi-DNA mf COOH	300 nm	2 mL
MD0200040010	MagSi-DNA mf COOH	300 nm	10 mL
MD0200040100	MagSi-DNA mf COOH	300 nm	100 mL

2.2 MagSi kits for DNA extraction



MagSi-DNA Body Fluid

MagSi-DNA Body Fluid allows fast and cost-effective extraction of genomic DNA from blood, saliva or swab samples. The magnetic bead-based kit can be used on fresh or frozen whole blood, fresh or preserved saliva samples or swab wash solutions. The ready-to-use reagents and simple protocol are convenient in use and easy to automate. As a linear volume to volume ratio is used between sample and reagents, it is possible to use the kit in any situation where high quality genomic DNA is needed. DNA is suitable for use in downstream applications such as PCR, genetic typing, SNP and mutation analysis and forensic analysis.

Art.No.	Product	Volume
MDKT00140096	MagSi-DNA Body Fluid	96 preps
MDKT00140960	MagSi-DNA Body Fluid	10 x 96 preps

MagSi-NA Pathogen

MagSi-NA Pathogen is intended for manual and automated isolation of pathogenic nucleic acids (DNA and RNA) from a wide range of sample types e.g. blood, plasma, serum, urine, swab washes, tissue, feces. It allows safe handling of potentially infectious samples, and is designed to avoid sample-to-sample cross-contaminations. The obtained nucleic acids can be used directly as template for downstream applications such as PCR, qPCR, qRT-PCR or any kind of enzymatic reaction.

Art.No.	Product	Volume
MDKT00170096	MagSi-NA Pathogen	96 preps
MDKT00170960	MagSi-NA Pathogen	10 x 96 preps



MagSi-DNA Vegetal

MagSi-DNA Vegetal kits allow for extraction of genomic DNA from plant samples. After a lysis step, DNA is bound to magnetic beads and after a series of washing steps in which unwanted components are removed, the DNA is finally released in an elution step.

MagSi-DNA Vegetal II is optimized for seed samples. The lysis chemistry is ideal for releasing nucleic acids from embryos in seeds that are rich in starch and fats, allowing optimal release of the DNA to be isolated.

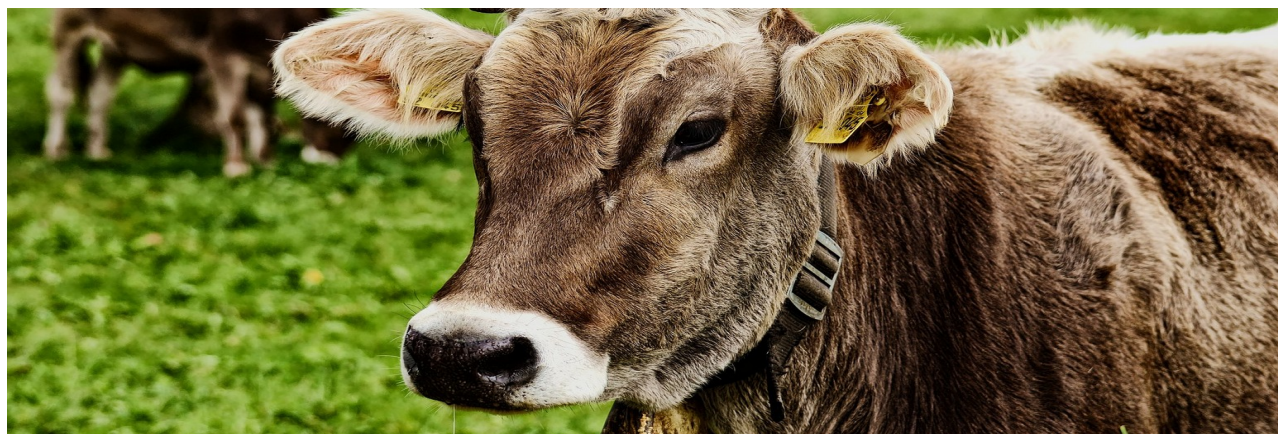
MagSi-DNA Vegetal III is optimized for DNA extraction from leaves. This lysis chemistry is ideal for leaf samples with high levels of secondary metabolites such as polyphenols and polysaccharides. MagSi-DNA Vegetal III can be used with alternative Lysis Buffer VG that is optimized for seeds. Therefore this offers a flexible solution for optimal extraction of both sample types in a single extraction run.

MagSi-DNA Vegetal kits are available in 96 and 10 x 96 preps kit sizes, can also be offered in a customized presentation with volumes of each of their components adjusted to facilitate your specific extraction requirements. Buffer components can be offered in bulk presentations of 1 and 5 Liter. We will advise you how to fine-tune the protocol for each of the kit components in your (automated) environment, and come to the most cost-effective solution.

MagSi-DNA Vegetal

MagSi-DNA Vegetal kits allow you to extract DNA from seeds and leaves of a broad range of plant species (e.g. cucumber, bell pepper, tomato, wheat, sugar beet, potato, chicory, maize, chrysanthemum or gerbera).

Art.No.	Product	Volume
MDKT00160096	MagSi-DNA Vegetal II	96 preps
MDKT00160960	MagSi-DNA Vegetal II	10 x 96 preps
MDKT00190096	MagSi-DNA Vegetal III	96 preps
MDKT00190960	MagSi-DNA Vegetal III	10 x 96 preps



MagSi-DNA Animal

MagSi-DNA Animal allows fast and cost-effective extraction of genomic DNA from various samples like blood, semen, hairs, saliva/swabs or lysed tissue. This universal DNA purification kit is optimized to extract DNA from sample materials with the highest purity and delivers DNA which is suitable for genotyping assays or other PCR based analyses. The extraction chemistry has been validated on different species, e.g. horse, swine, dog, cattle and can be customized to meet any specific requirements of yields, purity, working volumes.

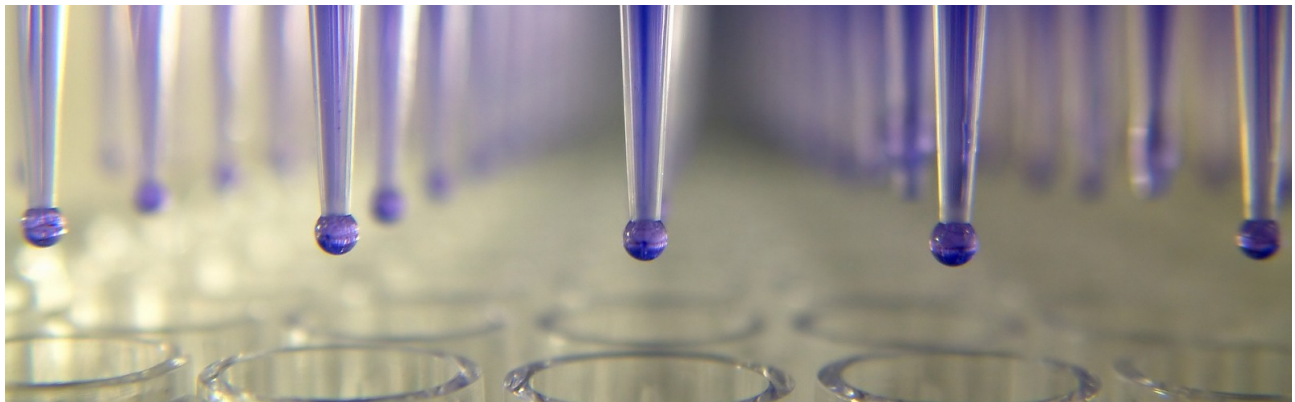
Art.No.	Product	Volume
MDKT00150096	MagSi-DNA Animal	96 preps
MDKT00150960	MagSi-DNA Animal	10 x 96 preps

Accessory materials to be offered with MagSi kits for DNA extraction

All DNA extraction kits include a final drying step to remove traces of ethanol before DNA elution. Wash Buffer III eliminates this step, resulting in faster protocols and DNA with higher purity.

Art.No.	Product	Volume
MDBU00111000	Wash Buffer III	1000 mL
MDBU00115000	Wash Buffer III	5000 mL

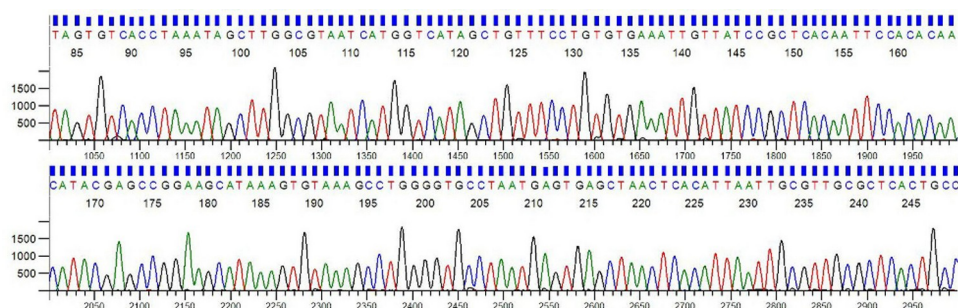
2.3 MagSi kits for purification of Sequencing and PCR reactions

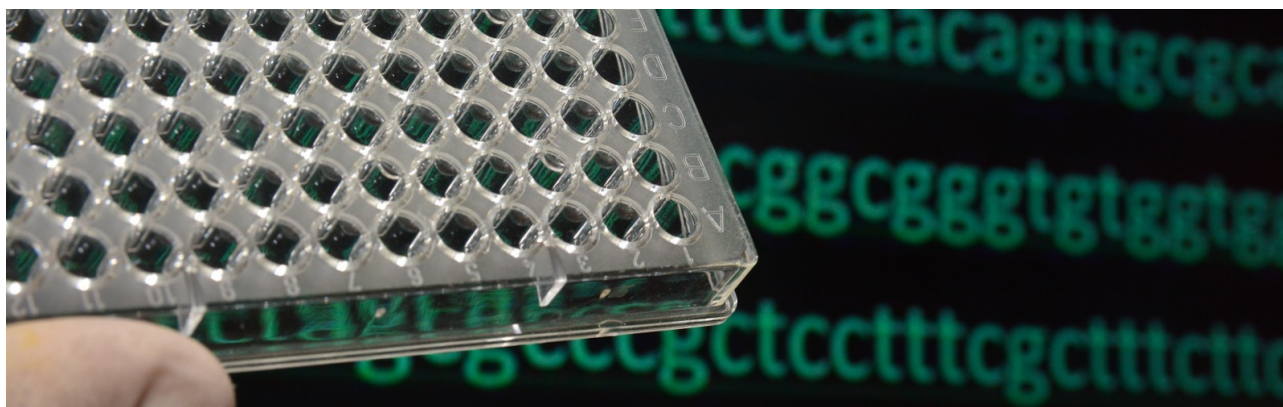


MagSi-DT Removal

MagSi-DT Removal provides an efficient solution for Dye-Terminator removal from BigDye® sequencing reactions. The kit is optimized for use on Biomek® Laboratory Automation Workstations and Hamilton® Microlab® STAR™Line. Post-cycle sequencing reaction contaminants that interfere with sequencing analysis (in particular unincorporated dyes) are removed by a rapid cleanup method without centrifugation or filtration. MagSi-DT Removal can be used in high-throughput processes with 96 and 384 well plates.

Art.No.	Product	Volume
MDKT00040008	MagSi-DT Removal	8 mL
MDKT00040050	MagSi-DT Removal	50 mL
MDKT00040500	MagSi-DT Removal	500 mL

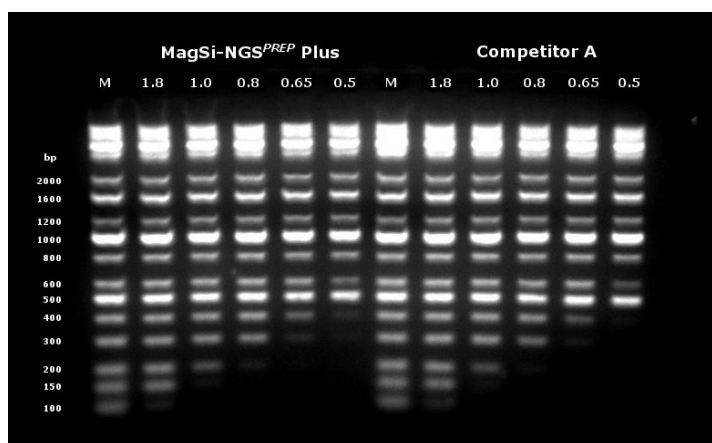




MagSi-NGS^{PREP} Plus

MagSi-NGS^{PREP} Plus provides a convenient tool for ultra-fast and efficient purification and size selection of DNA products. The kit is optimized for use on Biomek[®] Laboratory Automation Workstations and Hamilton[®] Microlab STARline. MagSi-NGS^{PREP} Plus allows either non-selective binding, or size-targeted binding of double-stranded DNA fragments ranging from 80 – 1000 bp with specific reagent volume to sample volume ratio's. By increasing the volume of MagSi-NGS^{PREP} Plus, the efficiency of binding smaller fragments increases. This enables the user to selectively keep or discard undesired fragment sizes. MagSi-NGS^{PREP} Plus' flexible protocols are easy to automate for high-throughput processing.

Art.No.	Product	Volume
MDKT00010005	MagSi-NGS ^{PREP} Plus	5 mL
MDKT00010075	MagSi-NGS ^{PREP} Plus	75 mL
MDKT00010500	MagSi-NGS ^{PREP} Plus	500 mL



3 MagSi Products for Immunoassays



3.1 Streptavidin beads for Immunoassays

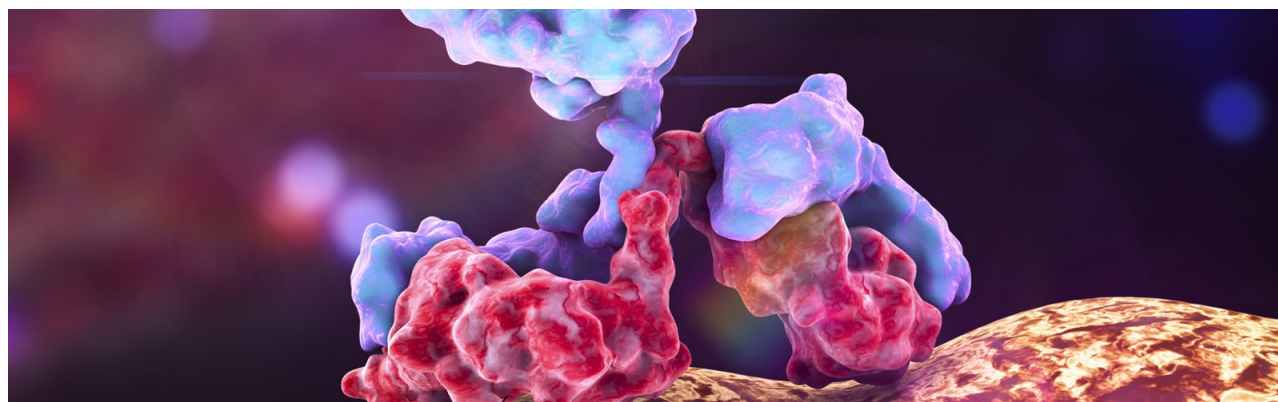
Magnetic particles are used as a solid support phase in immunoassays. MagSi-STA are superparamagnetic silica beads with a surface coating of streptavidin for use with biotinylated antibodies.

MagSi-STA Trial kit

The MagSi-STA Trial kit offers the opportunity of screening many types of streptavidin beads in parallel. The kit is especially useful when required specifications for magnetic beads are not known. This kit includes 1 ml of each of the 8 different MagSi-STA products (MagSi-STA 600, MagSi-STA 600 BI, MagSi-STA 1.0, MagSi-STA 1.0 L, MagSi-STA 1.0 TL, MagSi-STA 1.0 TS, MagSi-STA 3.0 L and MagSi-STA 3.0 TL) and is intended for evaluation purposes during trial phase of developing new assays, or bead replacement in existing assays.

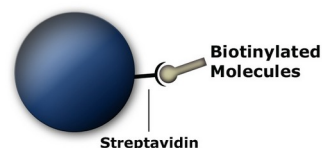
Art. No.	Product	Conc.	Size	Volume
MD50001	MagSi-STA Trial kit	10 mg/mL	600 nm, 1.0 μ m, 3.0 μ m	8 x 1 mL

The MagSi-STA Trial kit is also an excellent tool for feedback on a customized bead-type, which would fit any immunoassay in an optimal manner. Contact us during and after your trials to discuss the customized options.



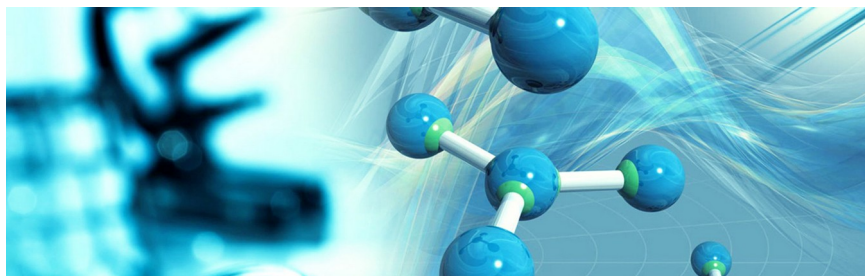
MagSi-STA

Magnetic silica particles with high quality streptavidin covalently attached to the bead surface. Applications include immunoassays and capture or purification of biotinylated molecules. Various types of this product are available, with different mean size, streptavidin coupling chemistry and binding capacity. All parameters can be customized on request.

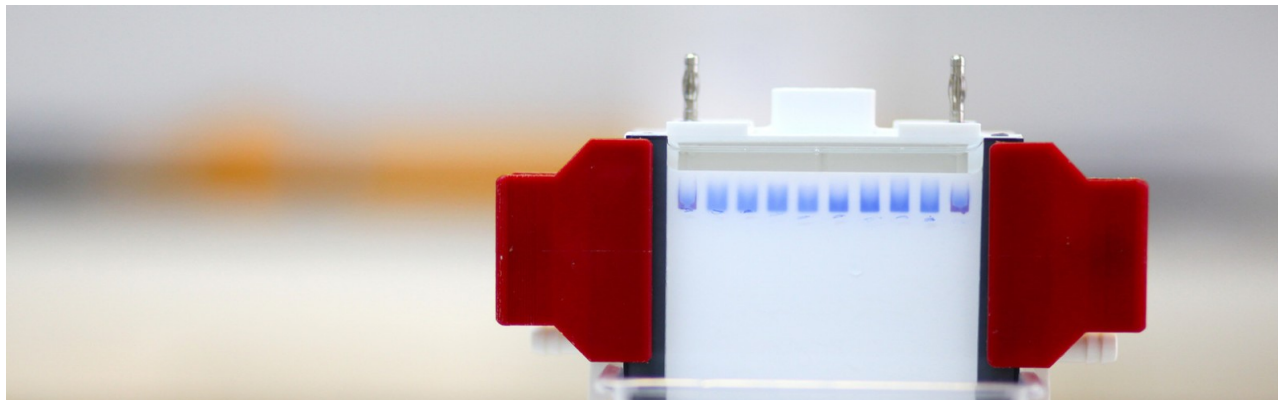


Art. No.	Product	Conc.	Size	Type*	Binding capacity (pmol biotin/mg)	Volume
MD16001	MagSi-STA 600	10 mg/mL	600 nm	C	3500-5000	2 mL
MD18001	MagSi-STA 600	10 mg/mL	600 nm	C	3500-5000	10 mL
MD19001	MagSi-STA 600	10 mg/mL	600 nm	C	3500-5000	100 mL
MD21001	MagSi-STA 600 BI	10 mg/mL	600 nm	C	6000-6800	2 mL
MD23001	MagSi-STA 600 BI	10 mg/mL	600 nm	C	6000-6800	10 mL
MD24001	MagSi-STA 600 BI	10 mg/mL	600 nm	C	6000-6800	100 mL
MD01001	MagSi-STA 1.0	10 mg/mL	1.0 µm	C	3500-5000	2 mL
MD03001	MagSi-STA 1.0	10 mg/mL	1.0 µm	C	3500-5000	10 mL
MD04001	MagSi-STA 1.0	10 mg/mL	1.0 µm	C	3500-5000	100 mL
MD06001	MagSi-STA 1.0 L	10 mg/mL	1.0 µm	C	1200-2000	2 mL
MD07001	MagSi-STA 1.0 L	10 mg/mL	1.0 µm	C	1200-2000	10 mL
MD08001	MagSi-STA 1.0 L	10 mg/mL	1.0 µm	C	1200-2000	100 mL
MD25001	MagSi-STA 1.0 TL	10 mg/mL	1.0 µm	T	1200-2000	2 mL
MD26001	MagSi-STA 1.0 TL	10 mg/mL	1.0 µm	T	1200-2000	10 mL
MD27001	MagSi-STA 1.0 TL	10 mg/mL	1.0 µm	T	1200-2000	100 mL
MD29001	MagSi-STA 1.0 TS	10 mg/mL	1.0 µm	T	3500-5000	2 mL
MD30001	MagSi-STA 1.0 TS	10 mg/mL	1.0 µm	T	3500-5000	10 mL
MD31001	MagSi-STA 1.0 TS	10 mg/mL	1.0 µm	T	3500-5000	100 mL
MD33001	MagSi-STA 3.0 L	10 mg/mL	3.0 µm	C	700-1200	2 mL
MD34001	MagSi-STA 3.0 L	10 mg/mL	3.0 µm	C	700-1200	10 mL
MD35001	MagSi-STA 3.0 L	10 mg/mL	3.0 µm	C	700-1200	100 mL
MD37001	MagSi-STA 3.0 TL	10 mg/mL	3.0 µm	T	500-900	2 mL
MD38001	MagSi-STA 3.0 TL	10 mg/mL	3.0 µm	T	500-900	10 mL
MD39001	MagSi-STA 3.0 TL	10 mg/mL	3.0 µm	T	500-900	100 mL

* Type refers to the applied streptavidin coupling chemistry. C (Carboxyl): This type is intended for applications which require a relatively hydrophilic surface and also includes a spacer. T (Tosyl): This type is intended for applications which require beads which are more hydrophobic.



4 MagSi Products for Protein and Peptide applications

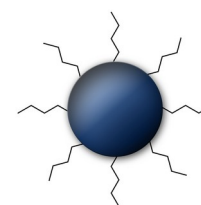


For more information and selection of the right magnetic bead type for your protein separation challenge, consult the **Proteomics Selection Guide**, or contact our technical support department.

4.1 Sample preparation for protein and peptide analysis

MagSi-proteomics

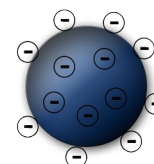
Magnetic silica particles with C4, C8 or C18 modified surface for sample preparation prior to mass spectrometry analysis. The relatively low hydrophobicity of MagSi-proteomics C4 allows for the purification and fractionation of larger biomolecules like proteins. MagSi-proteomics C8 have an intermediate hydrophobicity and are suitable for sample preparation in proteomic profiling and biomarker research. MagSi-proteomics C18 are ideal for the purification, concentration and desalting of peptides and protein digests.



Art. No.	Product	Volume
MD01014	MagSi-proteomics C4	2 mL
MD02014	MagSi-proteomics C4	10 mL
MD03014	MagSi-proteomics C4	100 mL
MD01015	MagSi-proteomics C8	2 mL
MD02015	MagSi-proteomics C8	10 mL
MD03015	MagSi-proteomics C8	100 mL
MD01009	MagSi-proteomics C18	2 mL
MD03009	MagSi-proteomics C18	10 mL
MD04009	MagSi-proteomics C18	100 mL

MagSi-WCX

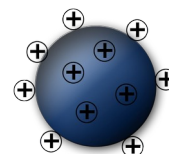
Magnetic silica particles with weak cation exchange surface (WCX). MagSi-WCX is ideal for the reduction of protein or peptide complexity. Applications include sample preparation and pre-fractionation prior to mass spectrometry or SDS-PAGE analysis, biomarker analysis and serum/plasma profiling.



Art. No.	Product	Volume
MD01023	MagSi-WCX	2 mL
MD02023	MagSi-WCX	10 mL
MD03023	MagSi-WCX	100 mL

MagSi-WAX

Magnetic silica particles with weak anion exchange surface (WAX). MagSi-WAX is ideal for the reduction of protein or peptide complexity. Applications include sample preparation and pre-fractionation prior to mass spectrometry or SDS-PAGE analysis, biomarker analysis and serum/plasma profiling.



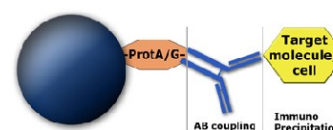
Art. No.	Product	Volume
MD01025	MagSi-WAX	2 mL
MD02025	MagSi-WAX	10 mL
MD03025	MagSi-WAX	100 mL

4.2 Immunoprecipitation & IgG purification

Protein A and Protein G bind to Fc regions of immunoglobulins. After binding onto magnetic beads with a coating of Protein A or Protein G, immobilized immunoglobulins can be used for immunoprecipitation of various biomolecules, or can be eluted in a native or denatured state. The magnetic particles with a mean size of 600 nm or 1.0 μm are best used for IgG purification and immunoprecipitation. The particles with a mean size of 3.0 μm are especially suitable for cell capture applications.

MagSi-protein A

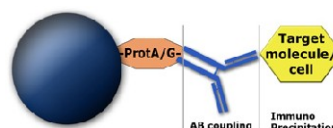
Magnetic silica particles with high quality recombinant Protein A covalently bound to the particle surface.



Art. No.	Product	Conc.	Size	Volume
MD10011	MagSi-protein A 600	10 mg/mL	600 nm	1 mL
MD11011	MagSi-protein A 600	10 mg/mL	600 nm	5 mL
MD01011	MagSi-protein A 1.0	10 mg/mL	1.0 μm	1 mL
MD02011	MagSi-protein A 1.0	10 mg/ml	1.0 μm	5 mL
MD41011	MagSi-protein A 3.0	10 mg/mL	3.0 μm	1 mL
MD42011	MagSi-protein A 3.0	10 mg/ml	3.0 μm	5 mL

MagSi-protein G

Magnetic silica particles with high quality recombinant Protein G covalently bound to the particle surface.



Art. No.	Product	Conc.	Size	Volume
MD10012	MagSi-protein G 600	10 mg/mL	600 nm	1 mL
MD11012	MagSi-protein G 600	10 mg/mL	600 nm	5 mL
MD01012	MagSi-protein G 1.0	10 mg/mL	1.0 μm	1 mL
MD02012	MagSi-protein G 1.0	10 mg/mL	1.0 μm	5 mL
MD41012	MagSi-protein G 3.0	10 mg/mL	3.0 μm	1 mL
MD42012	MagSi-protein G 3.0	10 mg/mL	3.0 μm	5 mL

5 MagSi Tools for Research & Development applications



5.1 MagSi-Tools

MagSi-Tools are surface activated magnetic beads for immobilization of proteins (antibodies, enzymes), peptides, nucleic acids or other molecules of interest. Different surface modifications allow for choosing the optimal product for the right molecule to be coupled, and for the intended application. The MagSi platform has a broad range of functionalization possibilities such as COOH, NH₂, SH, CHO, tosyl, hydrazide and epoxy. MagSi-Tools products are available with 600 nm, 1.0 µm or 3.0 µm mean diameter.

MagSi-S

Magnetic silica particles for own development use.

Art. No.	Product	Conc.	Size	Volume
MD16003	MagSi-S 600	10 mg/mL	600 nm	2 mL
MD18003	MagSi-S 600	10 mg/mL	600 nm	10 mL
MD19003	MagSi-S 600	10 mg/mL	600 nm	100 mL
MD01003	MagSi-S 1.0	10 mg/mL	1.0 µm	2 mL
MD03003	MagSi-S 1.0	10 mg/mL	1.0 µm	10 mL
MD04003	MagSi-S 1.0	10 mg/mL	1.0 µm	100 mL
MD41003	MagSi-S 3.0	10 mg/mL	3.0 µm	2 mL
MD43003	MagSi-S 3.0	10 mg/mL	3.0 µm	10 mL
MD44003	MagSi-S 3.0	10 mg/mL	3.0 µm	100 mL

MagSi-S COOH

Magnetic silica particles with a carboxyl modified surface. For carbodiimide coupling with NH₂-containing molecules.

Art. No.	Product	Conc.	Size	Volume
MD16004	MagSi-S COOH 600	10 mg/mL	600 nm	2 mL
MD18004	MagSi-S COOH 600	10 mg/mL	600 nm	10 mL
MD19004	MagSi-S COOH 600	10 mg/mL	600 nm	100 mL
MD01004	MagSi-S COOH 1.0	10 mg/mL	1.0 µm	2 mL
MD03004	MagSi-S COOH 1.0	10 mg/mL	1.0 µm	10 mL
MD04004	MagSi-S COOH 1.0	10 mg/mL	1.0 µm	100 mL
MD41004	MagSi-S COOH 3.0	10 mg/mL	3.0 µm	2 mL
MD43004	MagSi-S COOH 3.0	10 mg/mL	3.0 µm	10 mL
MD44004	MagSi-S COOH 3.0	10 mg/mL	3.0 µm	100 mL

MagSi-S NH₂

Magnetic silica particles with NH₂ modified surface. Intended for carbodiimide coupling chemistry with COOH-containing molecules or aldehyde coupling chemistry.

Art. No.	Product	Conc.	Size	Volume
MD16005	MagSi-S NH ₂ 600	10 mg/mL	600 nm	2 mL
MD18005	MagSi-S NH ₂ 600	10 mg/mL	600 nm	10 mL
MD19005	MagSi-S NH ₂ 600	10 mg/mL	600 nm	100 mL
MD01005	MagSi-S NH ₂ 1.0	10 mg/mL	1.0 µm	2 mL
MD03005	MagSi-S NH ₂ 1.0	10 mg/mL	1.0 µm	10 mL
MD04005	MagSi-S NH ₂ 1.0	10 mg/mL	1.0 µm	100 mL
MD41005	MagSi-S NH ₂ 3.0	10 mg/mL	3.0 µm	2 mL
MD43005	MagSi-S NH ₂ 3.0	10 mg/mL	3.0 µm	10 mL
MD44005	MagSi-S NH ₂ 3.0	10 mg/mL	3.0 µm	100 mL

MagSi-S SH

Magnetic silica particles with modified surface for SH coupling chemistry.

Art. No.	Product	Conc.	Size	Volume
MD18006	MagSi-S SH 600	10 mg/mL	600 nm	10 mL
MD19006	MagSi-S SH 600	10 mg/mL	600 nm	100 mL
MD03006	MagSi-S SH 1.0	10 mg/mL	1.0 µm	10 mL
MD04006	MagSi-S SH 1.0	10 mg/mL	1.0 µm	100 mL
MD43006	MagSi-S SH 3.0	10 mg/mL	3.0 µm	10 mL
MD44006	MagSi-S SH 3.0	10 mg/mL	3.0 µm	100 mL

MagSi-S CHO

Magnetic silica particles with aldehyde modified surface. Intended for aldehyde coupling chemistry with NH₂-containing molecules.

Art. No.	Product	Conc.	Size	Volume
MD18007	MagSi-S CHO 600	10 mg/mL	600 nm	10 mL
MD19007	MagSi-S CHO 600	10 mg/mL	600 nm	100 mL
MD03007	MagSi-S CHO 1.0	10 mg/mL	1.0 µm	10 mL
MD04007	MagSi-S CHO 1.0	10 mg/mL	1.0 µm	100 mL
MD43007	MagSi-S CHO 3.0	10 mg/mL	3.0 µm	10 mL
MD44007	MagSi-S CHO 3.0	10 mg/mL	3.0 µm	100 mL



MagSi-S Tosyl

Magnetic silica particles with tosyl modified surface. Intended for tosyl coupling chemistry with antibodies and proteins.

Art. No.	Product	Conc.	Size	Volume
MD16008	MagSi-S Tosyl 600	10 mg/mL	600 nm	2 mL
MD18008	MagSi-S Tosyl 600	10 mg/mL	600 nm	10 mL
MD19008	MagSi-S Tosyl 600	10 mg/mL	600 nm	100 mL
MD01008	MagSi-S Tosyl 1.0	10 mg/mL	1.0 µm	2 mL
MD03008	MagSi-S Tosyl 1.0	10 mg/mL	1.0 µm	10 mL
MD04008	MagSi-S Tosyl 1.0	10 mg/mL	1.0 µm	100 mL
MD41008	MagSi-S Tosyl 3.0	10 mg/mL	3.0 µm	2 mL
MD43008	MagSi-S Tosyl 3.0	10 mg/mL	3.0 µm	10 mL
MD44008	MagSi-S Tosyl 3.0	10 mg/mL	3.0 µm	100 mL

MagSi-S Hydrazide

Magnetic silica particles with hydrazide modified surface. Intended for immobilization of antibodies, glycoproteins or other aldehyde-containing molecules.

Art. No.	Product	Conc.	Size	Volume
MD16013	MagSi-S Hydrazide 600	10 mg/mL	600 nm	2 mL
MD18013	MagSi-S Hydrazide 600	10 mg/mL	600 nm	10 mL
MD19013	MagSi-S Hydrazide 600	10 mg/mL	600 nm	100 mL
MD01013	MagSi-S Hydrazide 1.0	10 mg/mL	1.0 µm	2 mL
MD03013	MagSi-S Hydrazide 1.0	10 mg/mL	1.0 µm	10 mL
MD04013	MagSi-S Hydrazide 1.0	10 mg/mL	1.0 µm	100 mL
MD41013	MagSi-S Hydrazide 3.0	10 mg/mL	3.0 µm	2 mL
MD43013	MagSi-S Hydrazide 3.0	10 mg/mL	3.0 µm	10 mL
MD44013	MagSi-S Hydrazide 3.0	10 mg/mL	3.0 µm	100 mL

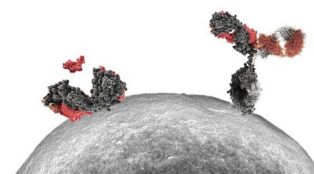
MagSi-S Epoxy

Magnetic silica particles with epoxy modified surface. Intended for coupling to enzymes and other NH₂-containing molecules.

Art. No.	Product	Conc.	Size	Volume
MD16010	MagSi-S Epoxy 600	10 mg/mL	600 nm	2 mL
MD18010	MagSi-S Epoxy 600	10 mg/mL	600 nm	10 mL
MD19010	MagSi-S Epoxy 600	10 mg/mL	600 nm	100 mL
MD01010	MagSi-S Epoxy 1.0	10 mg/mL	1.0 µm	2 mL
MD03010	MagSi-S Epoxy 1.0	10 mg/mL	1.0 µm	10 mL
MD04010	MagSi-S Epoxy 1.0	10 mg/mL	1.0 µm	100 mL
MD41010	MagSi-S Epoxy 3.0	10 mg/mL	3.0 µm	2 mL
MD43010	MagSi-S Epoxy 3.0	10 mg/mL	3.0 µm	10 mL
MD44010	MagSi-S Epoxy 3.0	10 mg/mL	3.0 µm	100 mL

5.2 MagSi-Direct Ready-to-use Coupling kits

MagSi-Direct enables coupling of the biological molecule of your choice to magnetic beads. The coating of MagSi-Direct acts as a nanoglue, using electron donation from electron-rich groups of the target molecule including -COOH, -CONH-, -NH₂, -NHR-, -NR₂, -OH and -SH. As a result, MagSi-Direct allows coupling of a wide variety of medium-large biomolecules, from non-protein molecules to proteins such as antibodies, cell receptor proteins, lectins, peptide aptamers and enzymes. The coating technology has a maximum interaction with large biomolecules.



MagSi-Direct 1.0

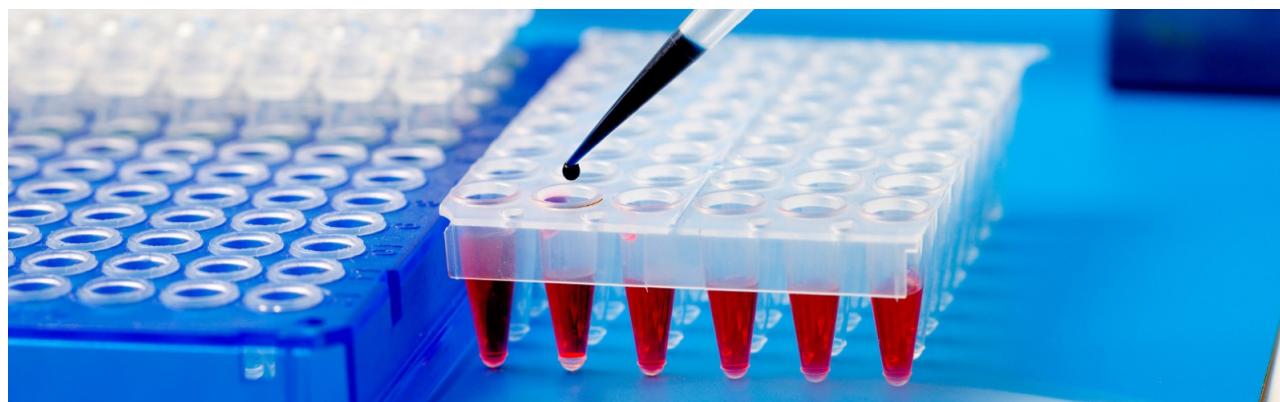
With a mean diameter of 1.0 µm, MagSi-Direct 1.0 is especially suitable for immunoassays and capture reactions in volumes ≤ 1000 µL. Includes ready-to-use MagSi-Direct 1.0 beads, 10x Immobilization Buffer and Blocking Buffer.

Art. No.	Product	Size
MD01029	MagSi-Direct 1.0	Small (contains 2 mL beads)
MD03029	MagSi-Direct 1.0	Medium (contains 10 mL beads)

MagSi-Direct 3.0

With a mean diameter of 3.0 µm, MagSi-Direct 3.0 is especially suitable for cell capture applications and capture reactions in high volumes or viscous samples. Includes ready-to-use MagSi-Direct 3.0 beads, 10x Immobilization Buffer and Blocking Buffer.

Art. No.	Product	Size
MD41029	MagSi-Direct 3.0	Small (contains 2 mL beads)
MD43029	MagSi-Direct 3.0	Medium (contains 10 mL beads)



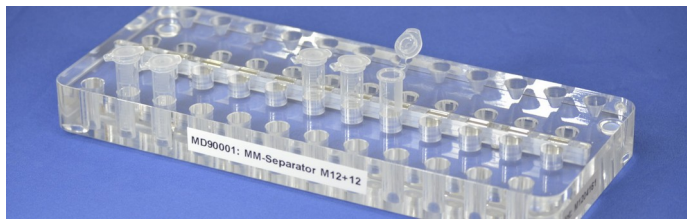
6 Magnetic Separators



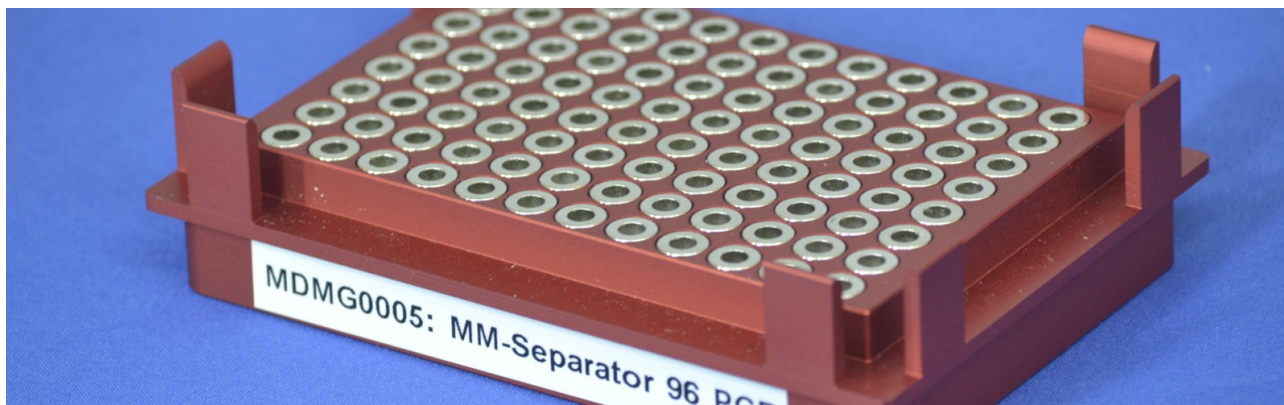
6.1 Magnetic Separators for Manual Use

These separators are intended for manual processing in microtubes, microplates and PCR tube-strips. The separators are available as transparent acrylic versions for optimal visual inspection needs and in chemically resistant polyoxymethylene (POM) for routine use of organic solvents. For detailed information about the resistency towards commonly used solvents, please contact our technical support department.

Art.No.	Product	Description
MD90001	MM-Separator M12 + 12	Magnetic separator for manual processing in 12 x 1.5 mL and 12 x 2 mL tubes, acrylic
MDMG0001	MM-Separator M12 + 12 P	Magnetic separator for manual processing in 12 x 1.5 mL and 12 x 2 mL tubes, POM
MD90002	MM-Separator M96	Magnetic separator for manual processing in 96-well microplates, acrylic
MDMG0002	MM-Separator M96 P	Magnetic separator for manual processing in 96-well microplates, POM
MD90003	MM-Separator PCR strip adapter	Adapter module for MM-Separator M96, for manual processing in PCR tube strips, acrylic
MDMG0003	MM-Separator PCR strip adapter P	Adapter module for MM-Separator M96, for manual processing in PCR tube strips, POM

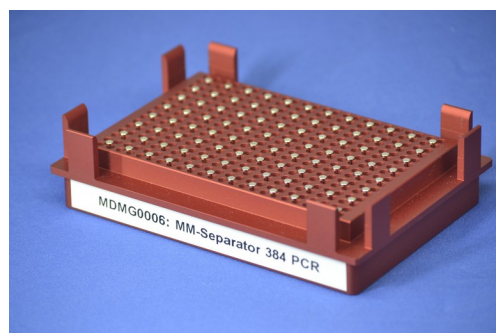
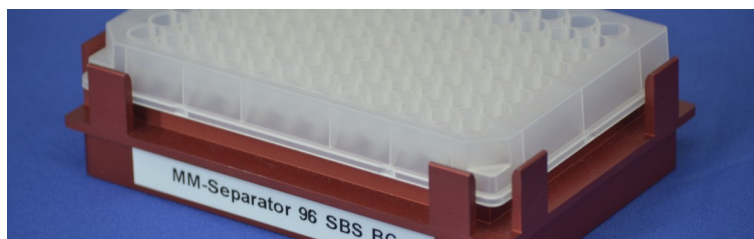


6.2 Magnetic Separators for Automated Processing



These separators are intended for automated processing of MagSi magnetic beads and MagSiMUS biological sample preparation kits in 96, 384 or deepwell microplates. They include a SBS standard registration base for easy placement on liquid handling instruments (e.g. the MagSiMUS^{DX}), and are suitable for separation in PCR plates and many other microplates. MM-Separator 32 FlipTube[®] is intended for use with the MagSiMUS^{DX} or other automated protocols using magnetic beads in FlipTubes[®].

Art.No.	Product	Description
MDMG0005	MM-Separator 96 PCR	Magnetic separator for automated processing in 96-well PCR microplates, side collection
MDMG0006	MM-Separator 384 PCR	Magnetic separator for automated processing in 384-well PCR microplates, side collection
MDMG0007	MM-Separator 96 SBS BC	Magnetic separator for automated processing in 96-well microplates, bottom collection
MDMG0008	MM-Separator 32 FlipTube [®] BC	Magnetic separator for automated processing in 32 FlipTube [®] 1.5 mL tubes, bottom collection
MDMG0009	MM-Separator 32 FlipTube [®] SC L	Magnetic separator for automated processing in 32 FlipTube [®] 1.5 mL tubes, side collection for low working volumes
MDMG0013	MM-Separator 96 DeepWell	Magnetic separator for automated processing in 96 DeepWell plates
MDMG0014	MM-Separator 384 DeepWell	Magnetic separator for automated processing in 384 DeepWell plates



7 Services

7.1 MagCustom

What if our catalog products do not meet your needs? Suppose you have the antibody to capture your specific cells or proteins; you have a readout system at hand to detect different fluorescent dyes at different wavelengths, but the fluorescent signal is under the detection limit. In this specific case, but also for other situations, we can provide a customized, rapid solution for you: MagCustom.

Our tailor made magnetic beads are available in small scales and at reasonable prices. No matter if you have to couple one or two different fluorescent dyes, a specific peptide, protein, or antibody. magtivio will find a solution to develop the product for your application.

We can develop individual customer solutions within a very short time cycle. These flexible solutions may vary from small batch size prototype productions up-to full scale productions including complete QA/QC development.

Tailor made magnetic – rapid prototyping and standardization.

MagCustom Feasibility Study, Project Definition and MagCustom Production are separate steps in this service.

7.2 Automation

We offer on-site service and support for your magnetic automation needs. Our service and software engineers will help you setup your automation protocols for your methods at your location, and our scientific advisors can give you method development support in the same manner. Integration of automation in your LIMS is another service we offer.

Please contact us to learn more about our **MagCustom** and **Automation** offering.



7.3 Distributor and Qualified Sales Partner

To companies with a focus towards bioanalytical laboratories in diagnostic, LC-MS or genomics R&D focus, magtivio offers the opportunity to sell magnetic separation solutions as a distributor or qualified sales partner in a specific geographic area. As such both MagSi and MagSiMUS products provide interesting business opportunities for your existing as well as your potential new clients. Our cooperation includes a broad package of logistics and marketing tools.

Contact magtivio's sales department for more information at sales@magtivio.com.

7.4 OEM solutions

You can rely on magtivio as your OEM partner for magnetic beads and kits. Our facilities and procedures will guarantee that you will get a reliable, compliant and high quality solution. Our services include a.o. customized filling and labelling of bead suspensions in the vial or container you want up to complete kit production according to your specifications and under your own trademark.

Filling volumes can vary from 1 mL for beads to 5 L for buffers.

Our logistic expertise will guarantee an adequate storage and shipping process.

7.5 Bulk supply

To companies active in the IVD or genomics area, magtivio offers the possibility for bulk supply (large volume deliveries). Our strictly controlled manufacturing processes are flexible to be scaled up to multi-liter quantities, and secure low cost.



8 General information

8.1 Get in Touch

magtivio B.V.

Daelderweg 9 | 6361 HK Nuth | The Netherlands

tel: +31 (0)45-2084810 | fax: +31 (0)45-2084817

info@magtivio.com | www.magtivio.com

8.2 Samples, Prices & Ordering

Samples can be requested via the sample request form on our website, or directly at info@magtivio.com

Prices for our products are quoted on request.

Orders can be placed directly at magtivio: order@magtivio.com

In your specific area/country, check for our Distributor or Qualified Sales Partner. Overview of our sales channels can be found at www.magtivio.com under **Contact**.

8.3 Technical Support

Send your technical support questions to support@magtivio.com.

Product Catalogs, Selection Guides, Product Leaflets, Application Notes, Scientific Posters, Product Manuals, Technical Notes, Safety Data Sheets (SDS) and Product Sheets can all be downloaded from the **Resources** section on our website www.magtivio.com. These documents already provide a lot of detailed technical information.



8.4 Legal

Our general Terms & Conditions, Privacy Policy and SHE Policy can be found at www.magtivio.com

8.5 Trademarks

FlipTube® is a registered trademark of GEMÜ GmbH Medical Plastics Processing Division

BigDye® is a registered trademark of PE Corp

Biomek® is registered trademark of Beckman Coulter, Inc

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magtivio B.V.
Daelderweg 9
6361 HK Nuth (The Netherlands)

Tel: +31-(0)45-2084810
Fax: +31-(0)45-2084817
www.magtivio.com