

The Perfect Fit for Magnetic Separation

Alpaqua® Magnet Plates and 4titude® FrameStar® Plates



When a perfect fit is required
FrameStar® and Alpaqua®
are the solution!

ALPAQUA®

4titude®

Alpaqua® Magnet Plates

Alpaqua® magnet plates are used in a variety of magnetic bead-based, nucleic acid isolation applications such as next generation sequencing (NGS), library construction, DNA and RNA extraction, sequencing and PCR clean up, and exome capture. Innovative design features, strong magnets and spring cushion technology* enable automation-friendly, high performance magnetic bead separation.

- SBS footprint and optimized for maximum robotic access
Automation-friendly for increased throughput
- Strong NdFeB magnets
Highly efficient capture of magnetic beads from viscous solutions
- Compatible with common magnetic bead protocols & chemistries
Reagent and application flexibility
- Integrated spring cushion technology
Complete liquid removal without tip occlusions

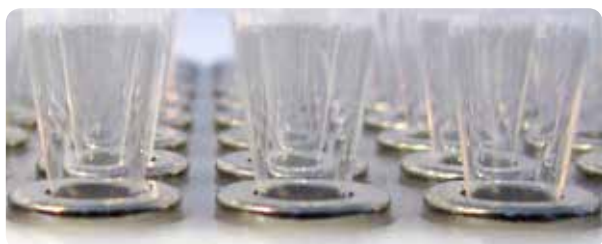


Alpaqua® offers a comprehensive line of 24-, 96- and 384-well magnet plates that accommodate a variety of applications, plate densities, sample volumes and viscosities.

Superior Plates Enable Superior Recovery

The use of distorted plates leads to uneven distribution of the magnetic bead rings. This in turn may result in variable recovery rates of nucleic acids. Furthermore, the interior surfaces of the wells need to be treated to prevent non-specific binding of samples and/or reagents during magnetic separation.

4titude®'s FrameStar® plates are extremely well suited for magnetic bead separation protocols using Alpaqua® magnet plates. The overall flatness of the FrameStar® plates efficiently prevents wobbling or warping, while their inert well surface provides for optimum bead and sample recovery.



"We tested a number of FrameStar® 96 plates and found them all to function efficiently with any of our Alpaqua® 96-well magnet plates."

Keith McKenna, Director of Applications and Business Intelligence, Alpaqua® Engineering LLC

The Common Problem

Thermocycling leads to distortion of standard PCR plates

- Wells are not uniformly in contact with the magnetic separator
- Magnetic bead sequestration is irregular
- Reduced and/or variable rate of nucleic acid recovery

The Perfect Solution

FrameStar® two-component plates with maximum thermal stability at high temperatures

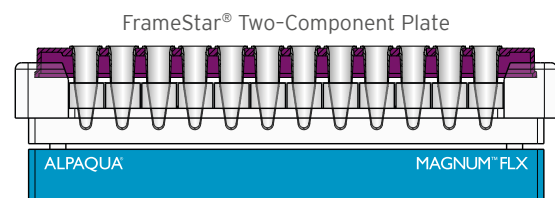
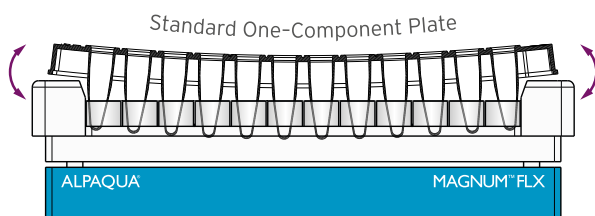
- Supreme overall flatness due to stable polycarbonate frame for reliable use with magnetic plates
- Thin-wall, low binding polypropylene tubes for maximum magnetic field strength and sample recovery



4titude® FrameStar® Two-Component Plates

4titude®'s FrameStar® PCR plates maximise thermal stability at high temperatures. This prevents sample loss by minimising thermal expansion during PCR. The two-component design combines the advantages of thin-wall polypropylene (PP) tubes, with a rigid polycarbonate (PC) skirt and deck creating the highest thermal stability and rigidity.

- Supreme flatness due to stable polycarbonate frame – No distortion of the plate, highest thermal stability and rigidity
Reliable use with magnetic separators, stackers, and liquid handlers
Perfect distribution of magnetic particles
- Polypropylene tubes
Inert surface with low binding capabilities for nucleic acids, proteins and other molecules
Thin walls allow for a maximum magnetic field and optimum PCR results
- Raised rims around each tube
Reduced risk of cross contamination between samples
- Cleanroom produced
Certified RNase, DNase, Human Genomic DNA free
- Large variety of FrameStar® plates available for highest flexibility
From unskirted to fully skirted, from low profile to standard profile, up to 6 frame colours and up to 4 well colour options available



Ordering Information

Alpaqua® Magnet Plates

Product Code	Product name and description
A001219	96R Ring Magnet Plate – Standard 96-well magnet plate for low volume separations
A001322	96S Super Magnet Plate – 96-well magnet plate for large volume separations, faster separations
A000250	96M Magnum™ – Powerful 96-well magnet plate for faster separation, large volumes or high viscosity samples
A000400	Magnum FLX® Enhanced Universal Magnet Plate – Universal 96-well magnet plate with the most powerful solid-core magnets for small to large sample volumes, faster separation, and low volume elution
A000380	Magnum™ EX Universal Magnet Plate – Universal 96-well magnet plate with powerful magnets, suitable for large volume or high viscosity samples
A000350	LE Magnet Plate – 96-well low elution volume magnet plate, for high DNA concentration, NGS-LC

Additional information about Alpaqua® magnet plate specifications can be found at www.alpaqua.com/magplates

4titude® FrameStar® Two-Component Plates

Product Code	Product name and description	Frame colour options
4ti-0960 range	FrameStar® 96 Skirted – fully skirted PCR plate, ultra rigid, high performance plate, 0.2 ml wells, well colour options: clear, white	
4ti-0950 range	FrameStar® 480/96 – semi-skirted PCR plate for Roche LightCycler® 480, ultra rigid, high performance plate, 0.2 ml wells, clear frame, well colour options: clear, white	
4ti-0910 range	FrameStar® FastPlate 96 – semi-skirted PCR plate for ABI® Fast Block thermal cyclers, ultra rigid, high performance plate, 0.2 ml wells, clear frame, well colour options: clear, frosted, white	
4ti-0730 range	FrameStar® 96 with Upstand – semi-skirted PCR plate for ABI® instruments, ultra rigid, high performance plate, 0.3 ml wells, well colour options: clear, white	
4ti-0770 range	FrameStar® 96 Semi-skirted (cut corner A12) – semi-skirted PCR plate, ultra rigid, high performance plate, 0.3 ml wells, well colour options: clear, frosted, white	
4ti-0900 range	FrameStar® 96 Semi-skirted (cut corner H1) – semi-skirted PCR plate, ultra rigid, high performance plate, 0.3 ml wells, clear frame, well colour options: clear, white	
4ti-0710 range	FrameStar® 96 Non-skirted standard profile – non-skirted PCR plate, ultra rigid, high performance plate, 0.3 ml wells, well colour options: clear, white	
4ti-0720 range	FrameStar® 96 Non-skirted low profile – non-skirted PCR plate, ultra rigid, high performance plate, 0.2 ml wells, well colour options: clear, white	

Additional information about 4titude®'s FrameStar® plates can be found at www.4ti.co.uk



Alpaqua® and Magnum FLX® are registered trademarks of Alpaqua Engineering, LLC in the U.S. and/or other countries. Magnum™ is a trademark of Alpaqua Engineering, LLC. *Spring cushion technology is covered under US Patent 6,755,384. Additional patents pending. 4titude® and FrameStar® are registered trademarks of 4titude Ltd. FrameStar® PCR plates are covered by one or more of the following U.S. patents or their foreign counterparts, owned by Eppendorf AG: US Patent Nos. 7,347,977 and 6,340,589. ABI® is a registered trademark of the Life Technologies Corporation, LightCycler® is a registered trademark of Roche.

4ti-FL-0011 Flyer Alpaqua/4titude en1/x/x/01.2016

ALPAQUA®

Alpaqua Engineering, LLC
 100 Cummings Center, Suite 424A
 Beverly MA 01915 • USA
 T: +1 (978) 878 9489 • F: +1 (978) 865 9499
 E: info@alpaqua.com • www.alpaqua.com

4titude®

4titude Ltd.
 The North Barn • Surrey Hills Business Park • Damphurst Lane
 Wotton • Surrey • RH5 6QT • United Kingdom
 T: +44 (0)1306 884885 • F: +44 (0)1306 884886
 E: info@4ti.co.uk • www.4ti.co.uk