

MAGNETIC PARTICLES RAW MATERIALS FOR IVD ASSAY DEVELOPMENT



New! Agilent LodeStars High Bind - with higher binding capacity

Agilent LodeStars

LodeStars are Agilent's proprietary high performance superparamagnetic particles designed for biomagnetic separations.

- Controlled surface functionality - **highly selective ligand capture**
- Low backgrounds - **excellent performance**
- **Rapid** magnetic response
- Uniform, monodispersed - **batch-to-batch reproducibility**
- Available in **two formats** - carboxyl and streptavidin

Expertise	Access to 40 years' experience in the manufacturing and development of innovative, high- technology products. Technical expertise to help support you understand key variables for optimal bead performance in your application.
Performance	Agilent's superparamagnetic beads are a critical raw material integrated into many of our customers' IVD assays worldwide. Ease of handling and performance are optimized for automated assays.
Quality	Beads with demonstrated performance, manufactured reproducibly, to a robust process in an ISO 9001 facility.
Flexibility	Custom quality and supply agreements. Small to multikilogram batch sizes.
Security of Supply	Scheduled deliveries and worldwide logistics minimize expense and risk, ensuring your beads are in the right place, and the right time. Inventory management provides batch and shelf life control.

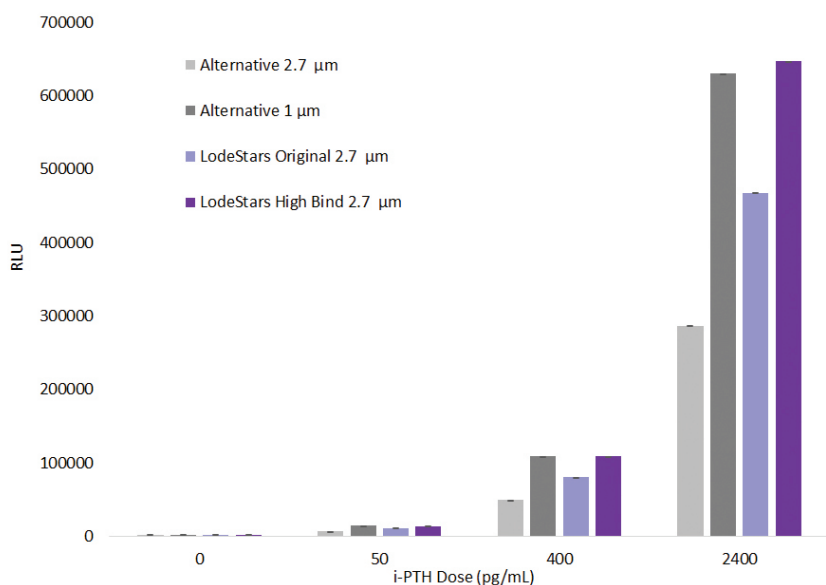
NEW LodeStars High Bind

LodeStars High Bind magnetic beads are a new addition to our LodeStars portfolio, with **more than double the binding capacity** of LodeStars Original 2.7 μm beads. This makes it possible to use less beads per assay whilst maintaining strong magnetic response.

Learn more:
www.agilent.com/chem/beads

Research study demonstrating the performance of new Agilent LodeStars High Bind against LodeStars Original and alternative commercially available magnetic particles

LodeStars High Bind combines the higher binding capacity of a 1 µm bead with the rapid magnetic response of a 2.7 µm bead. This provides the ideal combination of analytical sensitivity, sample throughput and reproducibility.



Agilent engaged a contract research organization to conduct a nonclinical performance study of particle performance using a commercially available i-PTH assay kit. The kit is designed to measure the amount of i-PTH present in a sample: reference i-PTH was used in this study. The study measured the fluorescence output of acridinium ester in a direct sandwich chemiluminescent assay, using an automated immunoanalyzer platform. The assay (performed in cuvette) comprised a biotinylated antihuman PTH antibody prebound to streptavidin coated beads. These were mixed with reference i-PTH sample in the presence of antihuman PTH antibody labeled with acridinium ester. The assay used a constant amount of antihuman PTH antibody labeled with acridinium ester and constant amount of beads per cuvette. The dose amount of reference i-PTH was varied between 0–2400 µg/mL. Streptavidin-magnetic beads used: LodeStars Original (2.7 µm), LodeStars High Bind (2.7 µm), Alternative 2.7 µm or Alternative 1 µm bead. (n=2; error bars show average cv%)

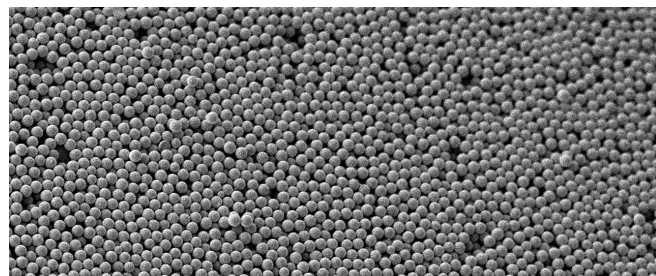
Technical Information

Specifications	LodeStars Original	LodeStars High Bind
Diameter	2.7 µm	2.7 µm
Iron content	~ 20%	~ 20%
Streptavidin binding capacities		
Biotin	> 1,200 pmoles/mg bead	> 3,000 pmoles/mg bead
Biotinylated IgG and anti-IgG-OG*	> 3.6 µg/mg bead	> 6.5 µg/mg bead
Carboxyl binding capacities		
BCA assay*	≥ 20 µg/mg bead	≥ 40 µg/mg bead

* Assay details available on request.

Ordering Information

Description	LodeStars Original		LodeStars High Bind	
LodeStars Carboxyl	2 mL	PL6727-0001	3 x 1 mL	PL6827-0030
	10 mL	PL6727-0003	10 mL	PL6827-0003
	100 mL	PL6727-0005	100 mL	PL6827-0005
	400 mL	PL6727-0006	400 mL	PL6827-0006
	800 mL	PL6727-0007		
LodeStars Streptavidin	2 mL	PL6727-1001	3 x 1 mL	PL6827-1030
	10 mL	PL6727-1003	10 mL	PL6827-1003
	100 mL	PL6727-1005	100 mL	PL6827-1005
	800 mL	PL6727-1007	800 mL	PL6827-1006



LodeStars are monodispersed and have narrow size distribution, ensuring reproducible results.

To find out more, visit:
www.agilent.com/chem/beads

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