MSD® GOLD Streptavidin and Avidin Plates

Ordering Information

MSD Customer Service
Phone: 1-240-314-2795
Fax: 1-301-990-2776
Email: CustomerService@mesoscale.com

Scientific Support

Phone: 1-240-314-2798
Email: ScientificSupport@mesoscale.com

Company Address

MESO SCALE DISCOVERY®
A division of
Meso Scale Diagnostics, LLC.
1601 Research Boulevard
Rockville, MD 20850-3173 USA

www.mesoscale.com®

Product Name	Catalog Number	Instrument Compatibility
MSD GOLD™ 96-well Small Spot Streptavidin SECTOR® Plates MSD GOLD 96-well Streptavidin SECTOR Plates MSD GOLD 96-well High Bind Avidin SECTOR Plates	L45SA L15SA L15AB	MESO® SECTOR S 600, SECTOR Imager 6000, SECTOR Imager 2400, and MESO QuickPlex® SQ 120
MSD GOLD 96-well Streptavidin QuickPlex® Plates MSD GOLD 96-well High Bind Avidin QuickPlex Plates	L55SA L55AB	MESO QuickPlex SQ 120

MSD GOLD Streptavidin- and Avidin-coated MULTI-ARRAY® plates provide a rapid and convenient method for the development of sandwich immunoassays, bridging immunogenicity assays, and assays for pharmacodynamic and pharmacokinetic studies. These plates are available in different spot formats as illustrated below. Streptavidin plates have a standard, hydrophobic surface; High Bind Avidin plates have a hydrophilic surface.

MSD GOLD Streptavidin-coated plates

96-Well, Small Spot Streptavidin Plate

96-Well, Streptavidin Plate

MSD GOLD Avidin-coated plate

96-Well, High Bind Avidin Plate

Choosing a Plate Type

Selection of the right plate type is critical for assay development. Several parameters play a role in determining the best plate type for an assay. In general, avidin-coated plates have the higher binding capacity due to their hydrophilic surface but tend to offer lower signals and sensitivity. These plates are ideal for assays that require a large dynamic range. Alternatively, streptavidin-coated plates have relatively lower binding capacity but provide higher assay signals and sensitivity. MSD GOLD Streptavidin plates are highly suited for use with homogenous assays or bridging assays, such as typical immunogenicity assays that require high free drug tolerance. Small Spot Streptavidin plates provide the highest assay signals and offer superior sensitivity.

The following table lists the binding capacity of MSD GOLD Streptavidin- and Avidin-coated plates as measured by titrating biotin-tagged IgG (BTI) (illustrated below) in each plate. The amounts are based on picomoles per well of biotinylated material. The capacity for non-IgG proteins or other biologicals may differ.

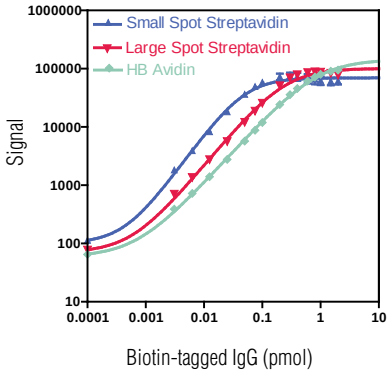
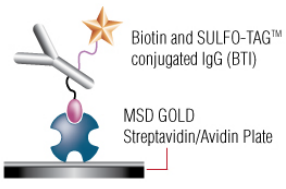


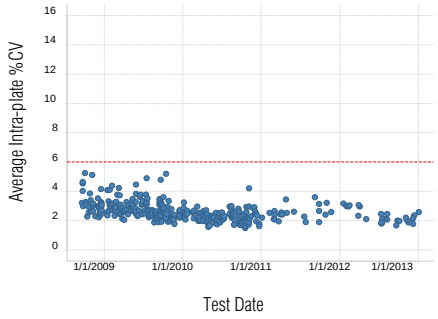
Plate Type	Surface Type	Binding Capacity (IgG)
MSD GOLD Small Spot Streptavidin Plate	Hydrophobic	0.075 pmol/well
MSD GOLD Streptavidin Plate	Hydrophobic	0.3 pmol/well
MSD GOLD High Bind Avidin Plate	Hydrophilic	0.6 pmol/well



For Research Use Only. Not for use in diagnostic procedures.

Plate Reproducibility

Reproducibility of plates was measured by testing entire MSD GOLD 96-well Streptavidin plates with a constant amount of BTI at 0.2 pmol/well. The mean signal and %CV was calculated for each plate (intra-plate %CV) and across plates (inter-plate %CV). The plots below show the reproducibility data from 286 lots of MSD GOLD Streptavidin plates. The average intra-plate %CVs over a 4-year period is shown on the left. Individual plate measurements are shown on the right hand plot. All plate lots met the quality specifications with a mean intra-plate CV of less than 6% and no plate having an intra-plate CV greater than 12%.



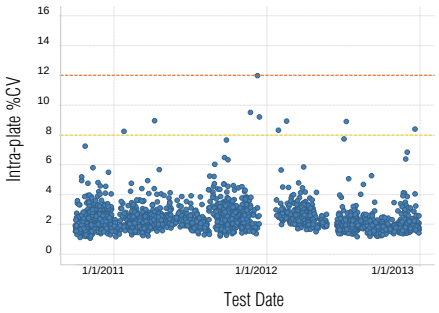


Plate Specifications

MSD GOLD designation certifies that the plates meet stringent specifications for consistency, reproducibility, and binding capacity. Each plate lot meets the consistent release criteria specified on the full certificate of analysis that is provided with the plates. Quality control specifications for MSD GOLD plates are shown below.

Whole-Plate Uniformity QC Specifications	
Metric	**Specification**
Mean intra-plate CV	≤6%
Intra-plate CV	≤8% for at least 91.5% of plates
Number of plates with intra-plate CV >12%	0 plates
Inter-plate CV	≤8%
Plates where signal >20% from plate mean occurs in same well on multiple plates	0 plates
Wells with signal >50% from plate mean	0 plates
Median signal for concentric rings, max to min range	≤10% for all plates
Median signal for columns, max to min range	≤10% for at least 91.5% plates, ≤15% for all plates
Median signal for rows, max to min range	≤10% for at least 91.5% plates, ≤15% for all plates
Number of plates sampled	Lot size dependent

Concentration of BTI for 96-well Streptavidin SECTOR Plate	Mean Electrochemiluminescence Signal Specification and Tolerance Range	Intra-plate CV or Standard Deviation (SD)
6 nM (0.3 pmol)	*73,000+/-15%	10
4 nM (0.2 pmol)	*55,000+/-15%	10
2 nM (0.1 pmol)	*28,000+/-15%	10
0 nM (0 pmol)	≤100 counts	SD≤15 counts

*These signal specifications are for a specific lot of BTI reagent and may vary for different lots. For the actual specifications, refer to the certificate of analysis supplied with the plates.