R

Spot the Difference®

The Meso Scale Discovery (MSD[®]) spot patterns are a hallmark of our MULTI-ARRAY[®] technology, which enables the detection of biomarkers in single and multiplex formats. As the next generation of electrochemiluminescence detection, MSD assays have ultra-low detection limits, provide up to five logs of linear dynamic range, use minimal sample, and handle difficult matrices easily. The extraordinary analytical performance of MSD assays provides many valuable advantages. Our sensitivity and dynamic range enable the development of assays that can measure native levels of biomarkers in normal and diseased samples without multiple dilutions, saving time, resources, sample, and cost. Our multiplex panels allow measurements of multiple analytes from a single sample—without extra work or time. Our simple protocols and streamlined formats help validations go smoothly. These advantages (and many others) are why so many people use MSD assays. It's not only what MSD assays can do-it's what you can do with MSD assays.

Rapid, Robust, Reproducible



- Wide dynamic range
- High sensitivity
- High precision
- Low background

Eliminates multiple dilutions Assay Solutions and Services





New! Fully Validated Immunossays We offer a large selection of assays with industry-leading reproducibility and sensitivity.

 Wide menu of individual and multiplex immunoassay kits

Streamlines protocols

Reduces matrix effects

- Customizable multiplex kits
- ELISA conversation packs and assay development tools
- Prototype printing services
- On-site assay development support
- Contract assay development

Multiplexing



- Multiple analytes in one well
- No compromise in performance or speed

MESO SECTOR® S 600

- Catalog assay panels for rapid delivery
- Custom assay panels available

MSD Instruments

- Ultra-fast read time
- No fluidics
- No user calibration required
- Reliable measurements
- Integrated data analysis tool MESO QuickPlex® SQ 120
- Comprehensive validation packages
- Software support for 21 CFR Part 11 compliance
- Comprehensive service plans





MSD's electrochemiluminescence detection technology uses SULFO-TAG[™] labels, which emit light upon electrochemical stimulation initiated at the electrode surfaces of MULTI-ARRAY and MULTI-SPOT[®] microplates.

Electrochemiluminescence Features:

- Minimal background signals and high signal to background ratios - the stimulation mechanism (electricity) is decoupled from the signal (light)
- Proximity only labels bound near the electrode surface are detected, enabling non-washed assays
- Flexibility labels are stable, non-radioactive, and conveniently conjugated to biological molecules
- Emission at ~620 nm eliminating problems with color quenching
- Signal amplification multiple excitation cycles of each label enhance light levels and improve sensitivity
- Flexible surface coatings to suit most any biology
- Carbon electrode plate surface has 10X greater binding capacity than polystyrene
- Custom surface coatings and patterns

MULTI-ARRAY and MULTI-SPOT Features:

- Capability to simultaneously measure multiple analytes in the same well
- High density arrays for high throughput multiplexing of biomarkers



96 Well 4-Spot

(036) (260) (260) (260)

96 Well 7-Spot



ng Electrode

R LIGHT Measured signal is light

ΤΡΔ

TPA

TPA

e

Dielectric

*Ru(bpy)32

Ru(bpy)32

Counter Electrode Ru(bpy)3

Worki

 The MSD DISCOVERY WORKBENCH[®] software provides customers with a powerful tool for data analysis



384 Well Single-Spot



MULTI-ARRAY Plate

Luminescence

nical Energy

mically Initiated

<u>Chemi</u>

Electro-

384 Well 4-Spot

Contact Information

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96 Well 10-Spot

