

MSD GOLD™ SULFO-TAG Anti-Human IgG Antibody



Ordering Information

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

Content	MSD GOLD SULFO-TAG Anti-Human IgG Antibody	Catalog No. D21APR-6
Storage	2-8 °C	

Summary

The MSD GOLD SULFO-TAG™ Anti-Human IgG Antibody is a monoclonal antibody that binds human immunoglobulin G (IgG), serving as an effective primary or secondary detection reagent in MSD assays. MSD has implemented stringent quality control measures for MSD GOLD SULFO-TAG Anti-Human IgG Antibody to ensure lot-to-lot reproducibility. The specifications meet the requirements of critical assays and longitudinal studies.

For the lot-specific specifications, refer to the certificate of analysis (COA) supplied with the product, which is also available at www.mesoscale.com.

Intended Use

The MSD GOLD SULFO-TAG Anti-Human IgG Antibody is supplied at a stock concentration of 400 µg/mL. The recommended working concentration for use in assays typically falls within the range of 0.2–2 µg/mL. As a reference, the working concentration of the IgG detection antibody in V-PLEX Serology assays is 2 µg/mL.

MSD recommends diluting the antibody to 1 µg/mL and incubating for at least 1 hour (25–50 µL/well) following sample incubation. If background signals exceed desired levels, consider reducing the concentration to 0.5 µg/mL or lower. Users should determine the optimal working concentration for each specific application.

Specificity

MSD GOLD SULFO-TAG Anti-Human IgG Antibody recognizes all IgG subclasses (IgG1, IgG2, IgG3, and IgG4), and cross-reactivity is less than 0.5% with other immunoglobulin isotypes (IgA and IgM).

Storage and Stability

In order to maximize consistency in electrochemiluminescence (ECL) signals across assay runs, MSD GOLD SULFO-TAG Anti-Human IgG Antibody should be stored at the recommended temperature and handled per the instructions provided in this document. This product is stable for 42 months at the recommended temperature. Short-term exposure of the SULFO-TAG antibody to ambient light and room temperature during the assay is generally not a concern. However, MSD doesn't recommend long-term exposure of the product to ambient light and room temperature.

Safety

Use safe laboratory practices and wear gloves, safety glasses, and lab coats when handling MSD GOLD SULFO-TAG Anti-Human IgG Antibody. Handle and dispose of all hazardous samples properly in accordance with local, state, and federal guidelines. Additional product-specific safety information is available in the applicable safety data sheet(s) (SDS), which can be obtained from MSD Customer Service or www.mesoscale.com.

Quality Specifications

MSD GOLD designation certifies that the products meet stringent specifications for accuracy and precision. The quality control process is designed to ensure the reproducibility of ECL signals across experiments. MSD GOLD SULFO-TAG Anti-Human IgG Antibody lots were tested on MSD GOLD 96-well Streptavidin SECTOR plates at six levels (0.5, 0.2, 0.125, 0.063, 0.031, and 0.016 µg/mL concentrations) of biotinylated human IgG to measure specific signal and without biotinylated human IgG to measure background signal. Quality control specifications for MSD GOLD SULFO-TAG Anti-Human IgG Antibody are shown in the table below.

Table 1: Quality control specifications for MSD GOLD SULFO-TAG Anti-Human IgG Antibody.

Metric	Specification
Test to reference signal ratio against biotinylated human IgG	±30%
Mean Intraplate Signal CV	≤20%
Max Background Signal (counts)	≤250
Standard Deviation of Background Signal (counts)	≤20

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Reproducibility

The reproducibility of MSD GOLD SULFO-TAG Anti-Human IgG Antibody was tested on MSD GOLD 96-well Streptavidin SECTOR™ plates at six levels of biotinylated human IgG. The graphs below (Figure 1A and 1B) demonstrate the signal reproducibility of four independent lots when tested across multiple days. Figure 1A shows the test to reference signal ratio (for 0.125 µg/mL biotinylated human IgG concentration), where dotted lines represent the specification ($\pm 30\%$). Figure 1B shows the mean background signal (specification: ≤ 250 signal count) for each lot, where error bars represent the standard deviation across all replicates ($n=8$).

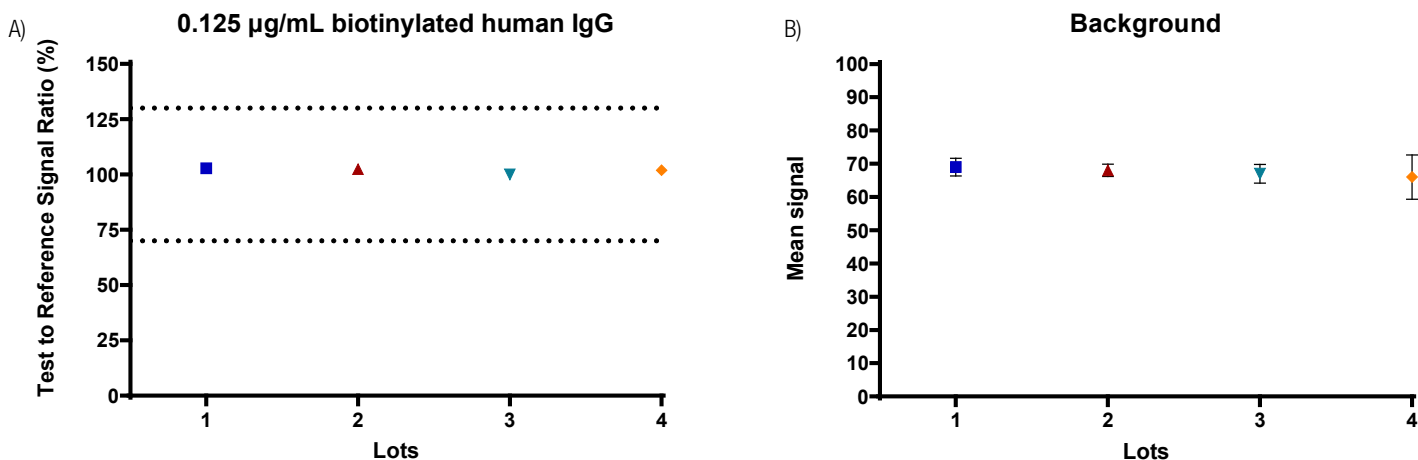


Figure 1: Reproducibility across four lots of MSD GOLD SULFO-TAG Anti-Human IgG Antibody: A) Test to reference signal ratio at 0.125 µg/mL biotinylated human IgG and B) Mean background signal.

Functional Performance

The functional performance of three independent lots of MSD GOLD SULFO-TAG Anti-Human IgG Antibody was tested on 33 antigens across five V-PLEX® Serology panels using a panel of serum samples ($N=12-21$). Representative data for the SARS-CoV-2 Spike, Mpxv A35R, and HCoV-OC43 Spike antigens are shown below (Figures 2A, 2B, and 2C). The graphs demonstrate excellent inter-lot concordance for three MSD GOLD SULFO-TAG Anti-Human IgG Antibody lots in measuring serum IgG levels.

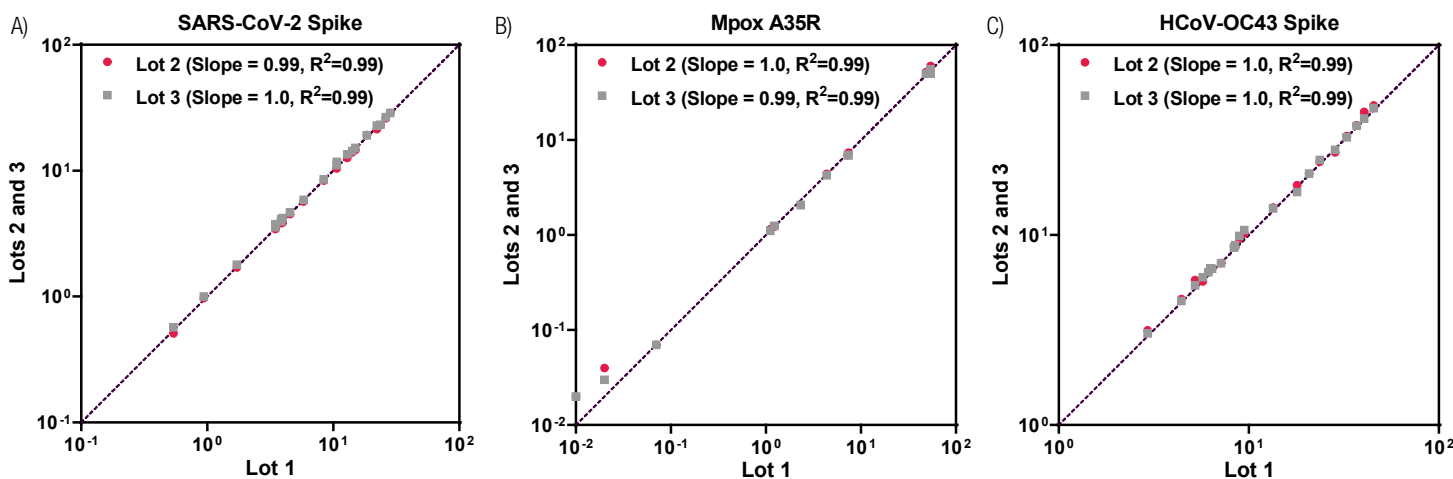


Figure 2: Functional performance: Inter-lot concordance for three MSD GOLD SULFO-TAG Anti-Human IgG Antibody lots in measuring serum IgG levels against A) SARS-CoV-2 Spike antigen, B) Mpxv virus A35R antigen, and C) Human Coronavirus (HCoV) OC43 Spike antigen.