MSD® Serology Assays

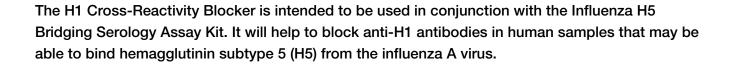
H1 Cross-Reactivity Blocker

Catalog No.

R93BL



H1 Cross-Reactivity Blocker



FOR RESEARCH USE ONLY.

NOT FOR USE IN DIAGNOSTIC PROCEDURES.

Meso Scale Discovery

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Introduction

The MESO SCALE DISCOVERY® Influenza H5 Bridging Serology Assay Kit (Catalog number: K150AXJU) detects the presence of antibodies that bind hemagglutinin subtype 5 (H5) from the influenza A virus. Some human samples contain anti-hemagglutinin subtype 1 (H1) antibodies that may be cross-reactive with H5. The Influenza H1 Cross-Reactivity Blocker reduces interference from these anti-H1 antibodies when running the Influenza H5 Bridging Serology Assay Kit.

Principle of the Blocker

The H1 Cross-Reactivity Blocker is an H1 analog. Antibodies in human serum seroconverted against H1 will preferentially bind the blocker instead of the H5 protein used in the H5 Bridging Serology Kit.

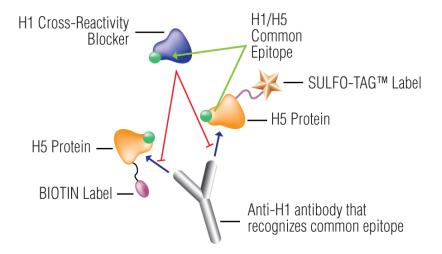


Figure 1. The H1 Cross-Reactivity Blocker can help prevent anti-H1 antibodies from binding the H5 protein.

Materials and Equipment

Additional Materials and Equipment

☐ Influenza H5 Bridging Serology Assay Kit (Catalog number : K150AXJU)

Safety

Use safe laboratory practices and wear gloves, safety glasses, and laboratory coats when handling kit components. 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 at www.mesoscale.com®.

Protocol

Best Practices

- Read this product insert in its entirety before using this product.
- Reagents received frozen should not be left at 4 °C for more than 24 hours.

Recommended Protocol

Bring all reagents to room temperature. Thaw samples on ice.

Prepare Assay Diluent with Blocker Solution

Use the Diluent 100 provided in the Influenza H5 Bridging Serology Assay Kit to dilute the Influenza H1 Cross-Reactivity Blocker. A full plate should require 9 to 10 mL of assay diluent with blocker.

| 2 00 | μL of Influenza H1 | Cross-reactivity | / Blocker (| (50X) |) |
|-------------|--------------------|------------------|-------------|-------|---|
|-------------|--------------------|------------------|-------------|-------|---|

9,800 μL of diluent

Assay Diluent with Blocker should be used during the Sample Preparation portion of the Influenza H5 Bridging Serology Assay Kit. It should be used at approximately a 1:20 dilution of sample with diluent. In cases where users are performing sample dilutions greater than 1:20, intermediate dilutions of sample may be performed in Diluent 100 without blocker.

Users do not need to incubate sample with the blocker prior to addition to the Master Mix.



Appendix: Example Data

Samples from 76 normal and 5 H5-vaccinated adults were commercially sourced. Each sample was tested for the presence of H5 antibodies using the Influenza H5 Serology Assay Kit with and without the H1 Cross-Reactivity Blocker.

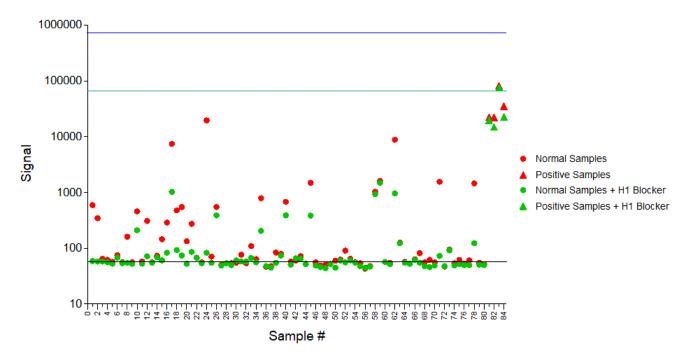


Figure 2. Signal counts for normal and vaccinated samples with and without the H1 Cross-Reactivity Blocker. The blue line represents H5 Control 1.1, the green line represents H5 Control 1.2 and the black line represents H5 Control 1.3. The H1 blocker reduced cross-reactive signals in many of the normal samples, providing better discrimination between normal and H5-vaccinated positive samples.

