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MSD V-PLEX Proinflammatory panel

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Protocol status: Working

We use this protocol and it's working

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Abstract

The V-PLEX panel offers analytically validated multiplex assay kits. Developed under rigorous design control, V-PLEX kits provide accurate and reproducible results with consistency from lot to lot. The V-PLEX Proinflammatory Panel 1 (human) Kit includes ten biomarkers that are associated with the inflammatory response and immune system regulation.



MSD V-PLEX Proinflammatory Panel

- 1 Prepare calibrator dilutions
 - a. Prepare the highest calibrator (Calibrator 1) by adding 1000mL of Diluent 2 to the lyophilized calibrator vial. After reconstituting, invert at least 3 times. Let it equilibrate for 15-30 minutes at room temperature and then vortex briefly using short pulses.
 - b. Prepare the next calibrator by transferring 100mL to the highest calibrator to 300mL of Diluent 2.
 - c. Use Diluent 2 as the zero calibrator.
- 2 Prepare Detection Antibody Solution

For one plate, combine 2.400mL of Diluent 3 with:

 - 60mL of SULFO-TAG Anti-hu IFN- γ Antibody
 - 60mL of SULFO-TAG Anti-hu IL-1b Antibody
 - 60mL of SULFO-TAG Anti-hu IL-2 Antibody
 - 60mL of SULFO-TAG Anti-hu IL-4 Antibody
 - 60mL of SULFO-TAG Anti-hu IL-6 Antibody
 - 60mL of SULFO-TAG Anti-hu IL-8 Antibody
 - 60mL of SULFO-TAG Anti-hu IL-10 Antibody
 - 60mL of SULFO-TAG Anti-hu IL-12p70 Antibody
 - 60mL of SULFO-TAG Anti-hu IL-13 Antibody
 - 60mL of SULFO-TAG Anti-hu TNF- α Antibody
- 3 Prepare Wash Buffer

For one plate combine:

 - 15mL of MSD Wash Buffer (20X)
 - 285mL of deionized water
- 4 Prepare Read Buffer T

For one plate combine:

 - 10mL of Read Buffer T (4X)
 - 10mL of deionized water
- 5 Assay Protocol
 - 5.1 Wash and Add Sample
 - a. Wash the plate 3 times with at least 150mL/well of Wash Buffer.
 - b. Add 50uL of prepared samples, calibrators, or controls per well.
 - c. Seal the plate with an adhesive plate seal.
 - d. Incubate at room temperature with shaking for 2h.
 - 5.2 Wash and Add Detection Antibody Solution
 - a. Wash the plate 3 times with at least 150mL/well of Wash Buffer.



- b. Add 25uL of detection antibody solution to each well.
- c. Seal the plate with an adhesive plate seal.
- d. Incubate at room temperature with shaking for 2h.

5.3 Wash and Read

- a. Wash the plate 3 times with at least 150mL/well of Wash Buffer.
- b. Add 150uL of 2X Read Buffer T to each well.
- c. Seal the plate with an adhesive plate seal.
- d. Analyze the plate on an MSD instrument.