

## CERTIFICATE OF ANALYSIS

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**Product Description:** V-PLEX® and V-PLEX Plus Cytokine Panel 1 (mouse) Kit  
**Kit Lot Number:** K0082036  
**Expiration Date:** 30 Apr 2023  
**Kit Catalog Numbers:** K15245-Series; K152WX-Series; K152RD-Series; K152RD-Series; K152WN-Series;  
 K152XB-Series; K152XC-Series; K152NQ-Series; K152QC-Series

**Precision and Accuracy Specifications:**

| Spot | Name           | Calibrator |       | Cytokine Panel 1 (mouse) Control 1 |       | Cytokine Panel 1 (mouse) Control 2 |       | Cytokine Panel 1 (mouse) Control 3 |       |
|------|----------------|------------|-------|------------------------------------|-------|------------------------------------|-------|------------------------------------|-------|
|      |                | Recovery   | CV    | Recovery                           | CV    | Recovery                           | CV    | Recovery                           | CV    |
| 1    | IL-9           | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 2    | MCP-1          | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 3    | IL-33          | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 4    | IL-27p28/IL-30 | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 5    | IL-15          | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 6    | IL-17A/F       | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 7    | MIP-1 $\alpha$ | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 8    | IP-10          | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |
| 9    | MIP-2          | 80% - 120% | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% | 75% - 125%                         | < 20% |

| Spot | Name           | LLOQ  |            |       | ULOQ  |            |       |
|------|----------------|-------|------------|-------|-------|------------|-------|
|      |                | Value | Recovery   | CV    | Value | Recovery   | CV    |
| 1    | IL-9           | 21.9  | 75% - 125% | < 20% | 2600  | 75% - 125% | < 20% |
| 2    | MCP-1          | 4.42  | 75% - 125% | < 20% | 325   | 75% - 125% | < 20% |
| 3    | IL-33          | 1.85  | 75% - 125% | < 20% | 1950  | 75% - 125% | < 20% |
| 4    | IL-27p28/IL-30 | 5.91  | 75% - 125% | < 20% | 6500  | 75% - 125% | < 20% |
| 5    | IL-15          | 43.2  | 75% - 125% | < 20% | 26000 | 75% - 125% | < 20% |
| 6    | IL-17A/F       | 1.39  | 75% - 125% | < 20% | 1620  | 75% - 125% | < 20% |
| 7    | MIP-1 $\alpha$ | 0.378 | 75% - 125% | < 20% | 390   | 75% - 125% | < 20% |
| 8    | IP-10          | 2.15  | 75% - 125% | < 20% | 650   | 75% - 125% | < 20% |
| 9    | MIP-2          | 0.577 | 75% - 125% | < 20% | 423   | 75% - 125% | < 20% |

**Non-Specific Binding Specifications:**

| Spot | Name           | NSB Spec |
|------|----------------|----------|
| 1    | IL-9           | < 1.0%   |
| 2    | MCP-1          | < 1.0%   |
| 3    | IL-33          | < 1.0%   |
| 4    | IL-27p28/IL-30 | < 1.0%   |
| 5    | IL-15          | < 1.0%   |
| 6    | IL-17A/F       | < 1.0%   |
| 7    | MIP-1 $\alpha$ | < 1.0%   |
| 8    | IP-10          | < 1.0%   |
| 9    | MIP-2          | < 1.0%   |

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**Stock Concentration of Calibrator:**


| Spot | Name           | Conc. | Units |
|------|----------------|-------|-------|
| 1    | IL-9           | 3645  | pg/mL |
| 2    | MCP-1          | 496   | pg/mL |
| 3    | IL-33          | 3025  | pg/mL |
| 4    | IL-27p28/IL-30 | 9565  | pg/mL |
| 5    | IL-15          | 39000 | pg/mL |
| 6    | IL-17A/F       | 2805  | pg/mL |
| 7    | MIP-1 $\alpha$ | 559   | pg/mL |
| 8    | IP-10          | 1095  | pg/mL |
| 9    | MIP-2          | 675   | pg/mL |

**Lot-Specific Components:**

| Description                               | Lot Number | Storage Temperature | Expiration Date |
|---|------------|---------------------|-----------------|
| Cytokine Panel 1 (mouse) Plate            | Z0047421   | 2-8°C               | 30 Apr 2023     |
| Anti-ms IL-9 Antibody                     | D0081582   | 2-8°C               | 30 Jun 2024     |
| Anti-ms MCP-1 Antibody                    | D0081583   | 2-8°C               | 30 Jun 2024     |
| Anti-ms IL-33 Antibody                    | D0081584   | 2-8°C               | 30 Jun 2024     |
| Anti-ms IL-27p28/IL-30 Antibody           | D0081585   | 2-8°C               | 30 Jun 2024     |
| Anti-ms IL-15 Antibody                    | D0081685   | 2-8°C               | 30 Sep 2024     |
| Anti-ms IL-17A/F Antibody                 | D0081586   | 2-8°C               | 31 Jul 2024     |
| Anti-ms MIP-1 $\alpha$ Antibody           | D0081587   | 2-8°C               | 30 Jun 2024     |
| Anti-ms IP-10 Antibody                    | D0081588   | 2-8°C               | 31 Jul 2024     |
| Anti-ms MIP-2 Antibody                    | D0081589   | 2-8°C               | 31 Jul 2024     |
| Cytokine Panel 1 (mouse) Calibrator Blend | A0080268   | 2-8°C               | 31 Aug 2025     |
| Diluent 41                                | M0410043   | ≤ -10°C             | 31 Mar 2024     |
| Diluent 45                                | M0450043   | ≤ -10°C             | 31 Jan 2024     |

Additional components may be provided to execute the assay. Additional components are not lot-specific.

The above product is intended for Research Use Only. Not for use in Diagnostic Procedures.

|                 | Name          | Function | Signature  | Date        |
|-----------------|---------------|----------|--|-------------|
| Review/Approval | Karen Hamilla | Quality  |  | 08 JUN 2022 |