

**CERTIFICATE OF ANALYSIS****Product Description:** V-PLEX and V-PLEX Plus Immune Response Panel 1 (human) Kit, SECTOR**Lot Number:** K0082689**Expiration Date:** 31 JUL 2027**Catalog Number:** K15742-Series, K151AWC-Series, K151AWD-Series, K151AWG-Series**Lot-Specific Components:**

Description	Lot Number	Storage Temperature	Expiration Date
Human GM-CSF Antibody	D0082420	2-8°C	31 JUL 2028
Human IFN- $\gamma$ Antibody	D0082421	2-8°C	31 JUL 2028
Human IL-10 Antibody	D0082426	2-8°C	31 AUG 2028
Human IL-12p70 Antibody	D0082425	2-8°C	31 AUG 2028
Human IL-17A Antibody	D0082428	2-8°C	31 AUG 2028
Human IL-1 $\beta$ Antibody	D0082424	2-8°C	31 AUG 2028
Human IL-2 Antibody	D0082422	2-8°C	31 JUL 2028
Human IL-6 Antibody	D0082429	2-8°C	31 JUL 2028
Human IL-8 Antibody	D0082427	2-8°C	31 AUG 2028
Human TNF- $\alpha$ Antibody	D0082430	2-8°C	31 JUL 2028
Immune Response Panel 1 (hu) 96-Well 10-Spot SECTOR Plate	Z0048108	2-8°C	30 SEP 2027
Diluent 58	M0580015	$\leq -10^{\circ}\text{C}$	31 JUL 2027
Immune Response Panel 1 (human) Calibrator Blend	A0080422	$\leq -70^{\circ}\text{C}$	30 SEP 2027

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

**Precision, Accuracy, and Sensitivity Specifications:**

Spot	Name	Calibrator		Immune Response Panel 1 (human) Control 1		Immune Response Panel 1 (human) Control 2		Immune Response Panel 1 (human) Control 3	
		Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	GM-CSF	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	IFN- $\gamma$	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	IL-1 $\beta$	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	IL-2	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	IL-12p70	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	IL-10	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	IL-8	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	IL-17A	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	TNF- $\alpha$	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%



### CERTIFICATE OF ANALYSIS

Spot	Name	LLOQ			ULOQ		
		Value	Recovery	CV	Value	Recovery	CV
1	GM-CSF	0.676	80% - 120%	< 20%	910	80% - 120%	< 20%
2	IFN- $\gamma$	0.748	80% - 120%	< 20%	1100	80% - 120%	< 20%
3	IL-1 $\beta$	0.351	80% - 120%	< 20%	481	80% - 120%	< 20%
4	IL-2	1.76	80% - 120%	< 20%	1310	80% - 120%	< 20%
5	IL-6	0.436	80% - 120%	< 20%	780	80% - 120%	< 20%
6	IL-12p70	0.479	80% - 120%	< 20%	1100	80% - 120%	< 20%
7	IL-10	0.354	80% - 120%	< 20%	650	80% - 120%	< 20%
8	IL-8	0.716	80% - 120%	< 20%	585	80% - 120%	< 20%
9	IL-17A	4.68	80% - 120%	< 20%	7800	80% - 120%	< 20%
10	TNF- $\alpha$	0.898	80% - 120%	< 20%	1360	80% - 120%	< 20%

#### Non-Specific Binding Specifications:

Spot	Name	Spec
1	GM-CSF	< 1.0%
2	IFN- $\gamma$	< 1.0%
3	IL-1 $\beta$	< 1.0%
4	IL-2	< 1.0%
5	IL-6	< 1.0%
6	IL-12p70	< 1.0%
7	IL-10	< 1.0%
8	IL-8	< 1.0%
9	IL-17A	< 1.0%
10	TNF- $\alpha$	< 1.0%

#### Stock Concentration of Calibrator:

Spot	Name	Conc.	Units
1	GM-CSF	7100	pg/mL
2	IFN- $\gamma$	7750	pg/mL
3	IL-1 $\beta$	3745	pg/mL
4	IL-2	14500	pg/mL
5	IL-6	5300	pg/mL
6	IL-12p70	9000	pg/mL
7	IL-10	5450	pg/mL
8	IL-8	4340	pg/mL
9	IL-17A	55000	pg/mL
10	TNF- $\alpha$	12050	pg/mL

Dilution to top of Curve: 5X

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

	Name	Function	Signature	Date
Review/Approval	Karen Hamilla	Quality		18 SEP 2025