

**CERTIFICATE OF ANALYSIS**

**Product Description:** V-PLEX and V-PLEX Plus Cytolytic Panel 1 (human) Kit, SECTOR  
**Lot Number:** K0082765  
**Expiration Date:** 31 JUL 2027  
**Catalog Number:** K15741-Series, K151AVA-Series, K151AVB-Series, K151AVF-Series

**Lot-Specific Components:**

Description	Lot Number	Storage Temperature	Expiration Date
Cytolytic Panel 1 (human) 96-Well 10-Spot SECTOR Plate	Z0048073	2-8°C	31 JUL 2027
Human GM-CSF Antibody	D0082404	2-8°C	30 JUN 2028
Human Granzyme B Antibody	D0082405	2-8°C	30 JUN 2028
Human IFN- $\gamma$ Antibody	D0082406	2-8°C	30 JUN 2028
Human IL-2 Antibody	D0082407	2-8°C	30 JUN 2028
Human IL-6 Antibody	D0082408	2-8°C	30 JUN 2028
Human Perforin Antibody	D0082409	2-8°C	30 JUN 2028
Human TNF- $\alpha$ Antibody	D0082410	2-8°C	30 JUN 2028
Diluent 58	M0580015	$\leq -10^{\circ}\text{C}$	31 JUL 2027
Cytolytic Panel 1 (human) Calibrator Blend	A0080420	$\leq -70^{\circ}\text{C}$	31 JUL 2027

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

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

Spot	Name	Calibrator		Cytolytic Panel 1 (human) Control 1		Cytolytic Panel 1 (human) Control 2		Cytolytic 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	Granzyme B	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	IFN- $\gamma$	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%
8	IL-6	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	Perforin	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	Granzyme B	0.657	80% - 120%	< 20%	1300	80% - 120%	< 20%
3	IFN- $\gamma$	0.748	80% - 120%	< 20%	1100	80% - 120%	< 20%
4	IL-2	1.76	80% - 120%	< 20%	1310	80% - 120%	< 20%
8	IL-6	0.436	80% - 120%	< 20%	780	80% - 120%	< 20%
9	Perforin	53.8	80% - 120%	< 20%	84500	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	Granzyme B	< 1.0%
3	IFN- $\gamma$	< 1.0%
4	IL-2	< 1.0%
8	IL-6	< 1.0%
9	Perforin	< 1.0%
10	TNF- $\alpha$	< 1.0%

**Stock Concentration of Calibrator:**

Spot	Name	Conc.	Units
1	GM-CSF	22200	pg/mL
2	Granzyme B	36400	pg/mL
3	IFN- $\gamma$	29700	pg/mL
4	IL-2	45700	pg/mL
8	IL-6	22700	pg/mL
9	Perforin	2280000	pg/mL
10	TNF- $\alpha$	37200	pg/mL

Dilution to top of Curve: 20X

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

	Name	Function	Signature	Date
Review/Approval	Karen Hamilla	Quality		11 SEP 2025