

CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Cytokine Panel 1 (human) Kit
Kit Lot Number: K0082001
Expiration Date: 31 May 2024
Kit Catalog Numbers: K15050-Series; K15057-Series; K151RC-Series; K151RG-Series; K156RC-Series; K156RG-Series; K151RE-Series; K156RE-Series

Precision and Accuracy Specifications:

		Calibrator		Cytokine Panel 1 (human) Control 1		Cytokine Panel 1 (human) Control 2		Cytokine Panel 1 (human) Control 3	
Spot	Name	Recovery	CV	Recovery	CV	Recovery	CV	Recovery	CV
1	GM-CSF	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
2	IL-1 α	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
3	IL-5	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
4	IL-7	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
5	IL-12/IL-23p40	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
6	IL-15	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
7	IL-16	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
8	IL-17A	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
9	TNF- β	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%
10	VEGF	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

		LLOQ			ULOQ		
Spot	Name	Value	Recovery	CV	Value	Recovery	CV
1	GM-CSF	0.842	80% - 120%	< 20%	750	80% - 120%	< 20%
2	IL-1 α	2.85	80% - 120%	< 20%	278	80% - 120%	< 20%
3	IL-5	4.41	80% - 120%	< 20%	562	80% - 120%	< 20%
4	IL-7	0.851	80% - 120%	< 20%	563	80% - 120%	< 20%
5	IL-12/IL-23p40	1.32	80% - 120%	< 20%	2250	80% - 120%	< 20%
6	IL-15	0.774	80% - 120%	< 20%	525	80% - 120%	< 20%
7	IL-16	19.1	80% - 120%	< 20%	1870	80% - 120%	< 20%
8	IL-17A	3.19	80% - 120%	< 20%	3650	80% - 120%	< 20%
9	TNF- β	0.465	80% - 120%	< 20%	458	80% - 120%	< 20%
10	VEGF	7.70	80% - 120%	< 20%	562	80% - 120%	< 20%

Non-Specific Binding Specifications:

Spot	Name	GM-CSF	IL-1 α	IL-5	IL-7	IL-12/IL-23p40	IL-15	IL-16	IL-17A	TNF- β	VEGF-A
1	GM-CSF	NA	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%
2	IL-1 α	< 1.0%	NA	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%
3	IL-5	< 1.0%	< 1.0%	NA	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%
4	IL-7	< 1.0%	< 1.0%	< 1.0%	NA	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%
5	IL-12/IL-23p40	< 1.0%	< 1.0%	< 1.0%	< 1.0%	NA	< 1.0%	< 1.0%	< 3.0%	< 1.0%	< 1.0%
6	IL-15	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	NA	< 1.0%	< 1.0%	< 1.0%	< 1.0%
7	IL-16	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	NA	< 1.0%	< 1.0%	< 1.0%
8	IL-17A	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	NA	< 1.0%	< 1.0%
9	TNF- β	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	NA	< 1.0%
10	VEGF	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	< 1.0%	NA

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Stock Concentration of Calibrator:


Spot	Name	Conc.	Units
1	GM-CSF	1250	pg/mL
2	IL-1 α	448	pg/mL
3	IL-5	849	pg/mL
4	IL-7	829	pg/mL
5	IL-12/IL-23p40	3220	pg/mL
6	IL-15	810	pg/mL
7	IL-16	2700	pg/mL
8	IL-17A	6970	pg/mL
9	TNF- β	761	pg/mL
10	VEGF	1140	pg/mL

Lot-Specific Components:

Description	Lot Number	Storage Temperature	Expiration Date
Cytokine Panel 1 (human) Plate	Z0047515	2-8°C	30 Sep 2024
Anti-hu GM-CSF Antibody	D0081654	2-8°C	31 Aug 2024
Anti-hu IL-1 α Antibody	D0081571	2-8°C	30 Sep 2024
Anti-hu IL-5 Antibody	D0081705	2-8°C	30 Nov 2024
Anti-hu IL-7 Antibody	D0081706	2-8°C	30 Nov 2024
Anti-hu IL-12/23p40 Antibody	D0081671	2-8°C	30 Nov 2024
Anti-hu IL-15 Antibody	D0081747	2-8°C	31 Mar 2025
Anti-hu IL-16 Antibody	D0081748	2-8°C	31 May 2025
Anti-hu IL-17A Antibody	D0081656	2-8°C	31 Aug 2024
Anti-hu TNF- β Antibody	D0081750	2-8°C	31 Mar 2025
Anti-hu VEGF Antibody	D0081772	2-8°C	30 Sep 2025
Cytokine Panel 1 (human) Calibrator Blend	A0080307	2-8°C	30 Sep 2026
Diluent 43	M0430047	$\leq -10^{\circ}\text{C}$	31 May 2024
Diluent 3	M0030114	$\leq -10^{\circ}\text{C}$	30 Sep 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		29 JUN 2022