CERTIFICATE OF ANALYSIS

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Product Description: V-PLEX® and V-PLEX Plus Human GM-CSF Kit

Kit Catalog Numbers: K151RI-series

Kit Lot Number: K0080844

Expiration Date: 31 Jul 2019

Acceptance Data/ Percent Recovery 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	hu GM-CSF	80% - 120%	< 20%	100% - 140%	< 20%	100% - 140%	< 20%	100% - 140%	< 20%

		LLOQ			ULOQ		
Spot	Name	Value	Recovery	CV	Value	Recovery	CV
1	hu GM-CSF	1.90	80% - 120%	< 20%	750	80% - 120%	< 20%

Stock Concentration of Material Tested:

Spot	Name	Item	Conc	Units
1	hu GM-CSF	Calibrator	971	pg/mL
		Cytokine Panel 1 (human) Control 1	388	pg/mL
		Cytokine Panel 1 (human) Control 2	60.6	pg/mL
		Cytokine Panel 1 (human) Control 3	9.33	pg/mL

Controls tested may not be the same lot as shipped.

Standard Curve Data:

hu GM-CSF - Spot 1					
Conc. pg/mL	ECL Signal	%CV			
971	210,000	3.0			
243	53,800	1.8			
60.7	14,200	2.4			
15.2	3,450	3.1			
3.79	936	3.0			
0.948	275	2.6			
0.237	121	5.1			
0.00	70	5.6			

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Components:

Description	Lot Number	Storage Temperature	Expiration Date
Human GM-CSF Plate	Z0046566	2-8°C	31 Dec 2019
Anti-hu GM-CSF Antibody	D0080885	2-8°C	31 Jul 2019
Cytokine Panel 1 (human) Calibrator Blend	A0080063	2-8°C	31 Jul 2020
Diluent 43	M0430021	≤ -10°C	30 Sep 2019
Diluent 3	M0030077	≤-10°C	30 Nov 2019
MSD Read Buffer T	Not Kit Specific	Not Kit Specific	N/A

Additional Components Included in V-PLEX Plus				
Plate Seals	Not Kit Specific			
Wash Buffer (20x)	Not Kit Specific			
Cytokine Panel 1 (human) Control 1	Not Kit Specific			
Cytokine Panel 1 (human) Control 2	Not Kit Specific			
Cytokine Panel 1 (human) Control 3	Not Kit Specific			

Statement:

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

	Name	Function	Signature	Date
Review/Approval	Dawn Stollar	Quality Assurance	Dawn Stollar	07 AUG 2017