Mess Scale Diagnostics, LLC. CERTIFICATE OF ANALYSIS

Page 1 of 2

Product Description:	V-PLEX® and V-PLEX Plus NHP IL-15 Kit
Kit Catalog Numbers:	K156RD-Series
Kit Lot Number:	K0080957
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	NHP IL-15	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%	80% - 120%	< 20%

		LLOQ			ULOQ		
Spot	Name	Value	Recovery	CV	Value	Recovery	CV
1	NHP IL-15	1.40	80% - 120%	< 20%	525	80% - 120%	< 20%

Stock Concentration of Material Tested :

Spot	Name	Item	Conc	Units
1 NHP IL-15	Calibrator	789	pg/mL	
	NUD II 15	Cytokine Panel 1 (human) Control 1	280	pg/mL
	Cytokine Panel 1 (human) Control 2	50	pg/mL	
		Cytokine Panel 1 (human) Control 3	10	pg/mL

Controls tested may not be the same lot as shipped.

The calibrator and controls for this assay contain a human recombinant cytokine calibrator sequence that is highly homologous to the non-human primate cytokine. This assay has been verified to cross-react with homologs of rhesus and cynomolgus monkeys. See Product Insert for experimental data.

Standard Curve Data:

NHP IL-15 - Spot 1					
Conc. pg/mL	ECL Signal	%CV			
789	272,000	2.3			
197	50,500	2.2			
49.3	11,800	2.7			
12.3	3,000	1.3			
3.08	801	2.2			
0.771	251	2.8			
0.193	110	2.7			
0.00	63	5.8			

Mess Stale Diagnostics, LLC. CERTIFICATE OF ANALYSIS

Page 2 of 2

Components:

Description	Lot Number	Storage Temperature	Expiration Date
Human IL-15 Plate	Z0046759	2-8°C	31 Jul 2020
Anti-hu IL-15 Antibody	D0080890	2-8°C	31 Jul 2019
Cytokine Panel 1 (human) Calibrator Blend	A0080121	2-8°C	28 Feb 2022
Diluent 43	M0430021	\leq -10°C	30 Sep 2019
Diluent 3	M0030077	\leq -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), 100mL	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	19 MAR 2018