



Fluorokine[®] MAP Human sVCAM-1/CD106 Kit

Catalog Number: LAD809

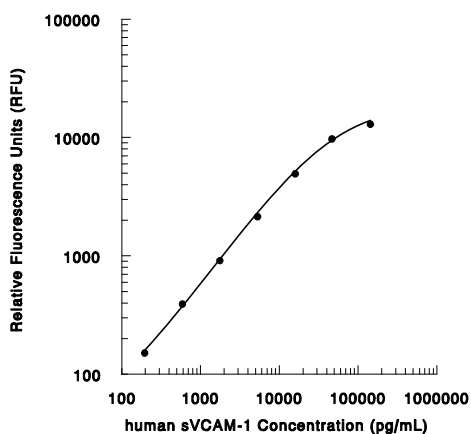
Pack Size: 100 Tests

Specifications and Use

- Recommended Sample Types**
 - Cell culture supernates, serum, EDTA plasma, and heparin plasma.
- Microparticle Region**
 - Region - 20
- Components**
 - Microparticle Concentrate (Part 893060) is supplied as a 100X concentrated stock (0.075 mL) with preservatives.
 - Biotin-Antibody Concentrate (Part 893067) is supplied as a 100X concentrated stock solution (0.075 mL) with preservatives.
- Other Supplies Required**
 - Fluorokine MAP Human Adhesion Molecule Base Kit (Catalog Number LAD000).
- Storage**
 - Store unopened kit at 2 - 8° C. Do not use past the expiration date on the label.
 - **Avoid freezing microparticles.**
 - **Protect microparticles from light.**
- Instructions for Use**
 - Refer to the appropriate Base Kit insert for the Fluorokine MAP assay procedure.

Typical Data

This human sVCAM-1 standard curve is provided only for demonstration. A standard curve must be generated each time an assay is run, utilizing values from the Standard Value Card included in the appropriate Base Kit.



Standard	pg/mL	RFU	Average	Corrected
Blank	0	4 4	4	—
1	143,000	12474 13455	12965	12961
2	47,667	9722 9737	9730	9726
3	15,889	4982 4897	4940	4936
4	5296	2141 2153	2147	2143
5	1765	880 953	917	913
6	588	383 409	396	392
7	196	164 145	155	151

Performance Characteristics

All data were collected with assays run as a multiplex.

Sensitivity - The Minimum Detectable Dose (MDD) was determined by adding two standard deviations to the mean RFU of twenty zero standard replicates and calculating the corresponding concentration.

Twelve assays were evaluated, and the MDD of human sVCAM-1 ranged from 0.30 - 8.21 pg/mL. The mean MDD was 1.72 pg/mL.

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.

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Intra-assay Precision (precision within an assay) - Three samples of known concentration were tested twenty times on one plate to assess precision within an assay.

Inter-assay Precision (precision between assays) - Three samples of known concentration were tested in twenty-three separate assays to assess precision between assays.

Intra-assay Precision				Inter-assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	23	23	23
Mean (pg/mL)	916	7412	46,323	1166	8571	51,501
Standard Deviation	35.5	351	3231	172	774	9319
% CV	3.9	4.7	7.0	14.7	11.4	18.1

Recovery and Linearity - Cell culture media samples were spiked with recombinant human sVCAM-1 and evaluated for recovery. Cell culture supernate, serum and plasma samples were serially diluted to evaluate assay linearity.

Recovery			Linearity					
Sample	Average % Recovery	Range (%)		Cell culture supernates	Serum	EDTA Plasma	Heparin Plasma	
Cell culture media	98	85 - 112	1:2	Average % of Expected	101	106	109	118
				Range (%)	97 - 105	88 - 115	97 - 118	108 - 130
			1:4	Average % of Expected	100	113	115	121
				Range (%)	89 - 120	93 - 119	99 - 138	108 - 130
			1:8	Average % of Expected	99	111	112	121
				Range (%)	89 - 108	93 - 121	95 - 132	101 - 134

Specificity - This assay recognizes both natural and recombinant human sVCAM-1. The assay was tested for interference and cross-reactivity with the factors listed below. Less than 1.0% cross-reactivity and interference was observed.

Recombinant human:	BMP-10	Galectin-1	NCAM-L1	Recombinant mouse:	MadCAM-1	Recombinant amphibian:
Activin A	BMP-15	Galectin-2	NrCAM	ALCAM	Noggin	TGF- β 5
Activin RIA	Cadherin-8	Galectin-3	P-Cadherin	BMP RIA	P-Cadherin	
Activin RIIA	Cadherin-11	Galectin-4	PECAM	BMP RIB	P-Selectin	Recombinant zebrafish:
Activin RIIIB	CHL-1	Galectin-7	Siglec-2	BMP-3B	Siglec-F	BMP-2
ALCAM	Contactin-1	Galectin-8	Siglec-3	CHL-1	VCAM-1	
BCAM	Contactin-2	ICAM-2	Siglec-5	E-Cadherin	Recombinant rat:	Recombinant human
BMP RIA	Contactin-4	ICAM-3	Siglec-7	E-Selectin	Agrin	Multiplex partners:
BMP RIB	DC SIGN R	ICAM-5	Siglec-9	Galectin-1	E-Selectin	sICAM-1
BMP R2	Desmoglein-1	Inhibin A	TGF- α	Galectin-7	ICAM-1	sE-Selectin
BMP-1.1	Desmoglein-2	Inhibin B	TGF- β	ICAM-1	ICAM-2	sP-Selectin
BMP-2	DNAM-1	JAM-1	TGF- β 1	ICAM-2	ICAM-5	
BMP-3	E-Cadherin	JAM-2	TGF- β 1.2	ICAM-5	JAM-1	
BMP-3B	Ecalectin	JAM-3	TGF- β 2	JAM-1	JAM-2	Recombinant porcine:
BMP-4	Endocan	LAP	TGF- β 3	JAM-2	JAM-3	TGF- β 2
BMP-5	EpCAM	LOX-1	TGF- β sRII	JAM-3	LOX-1	
BMP-6	Follistatin ²⁸⁸	L-Selectin	TGF- β sRIII	LOX-1		
BMP-8b	Follistatin ³⁰⁰	MCAM	TROP-2			
	Follistatin ³¹⁵	N-Cadherin	VE-Cadherin			

Technical Hints:

- Protect the microparticles and streptavidin-PE from light at all times.
- Refer to the appropriate Base Kit Standard Value Card for reconstitution volume and value of the working standard.
- Diluted microparticles cannot be stored. Make a fresh dilution of microparticles each time the assay is run.
- The use of a vacuum manifold device made to accommodate a microplate is necessary for washing. Adjust the vacuum to between 15 and 40 cm Hg.
- Discrepancies may exist in values obtained for the same analyte utilizing different technologies.

Fluorokine MAP affords the user the benefit of multianalyte analysis of protein biomarkers in a complex sample. For each sample type, a single, multipurpose diluent is used to optimize recovery, linearity and reproducibility. Such a multipurpose, single diluent may not optimize any single analyte to the same degree that a unique diluent selected for analysis of that analyte can optimize conditions. Therefore, some performance characteristics may be more variable than those for assays designed specifically for single analyte analysis.