



Rat Semaphorin-3A(SEMA3A) ELISA kit

Product Code	CSB-EL020980RA
Abbreviation	SEMA3A
Protein Biological Process 1	Developmental Protein
Target Name	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A
Uniprot No.	Q63548
Alias	Hsema-I, Hsema-III, MGC133243, SEMA1, SEMAD, SEMAIII, SEMAL, SemD, coll-1, OTTHUMP00000208884 collapsin 1 semaphorin 3A semaphorin D semaphorin III semaphorin L semaphorin-like
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Differentiation
Sample Types	serum, plasma, tissue homogenates
Detection Range	7.8 ng/mL-500 ng/mL
Sensitivity	1.95 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cardiovascular
Gene Names	Sema3a
Tag Info	quantitative
Protein Description	Sandwich

Description

This Rat SEMA3A ELISA Kit was designed for the quantitative measurement of Rat SEMA3A protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 7.8 ng/mL-500 ng/mL and the sensitivity is 1.95 ng/mL.

Target Details

This gene is a member of the semaphorin family and encodes a protein with an Ig-like C2-type (immunoglobulin-like) domain, a PSI domain and a Sema domain. This secreted protein can function as either a chemorepulsive agent, inhibiting axonal outgrowth, or as a chemoattractive agent, stimulating the growth of apical dendrites. In both cases, the protein is vital for normal neuronal



pattern development. Increased expression of this protein is associated with schizophrenia and is seen in a variety of human tumor cell lines. Also, aberrant release of this protein is associated with the progression of Alzheimer s disease.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat SEMA3A in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	92
	Range %	87-96
1:2	Average %	102
	Range %	98-106
1:4	Average %	87
	Range %	83-92
1:8	Average %	98
	Range %	94-102

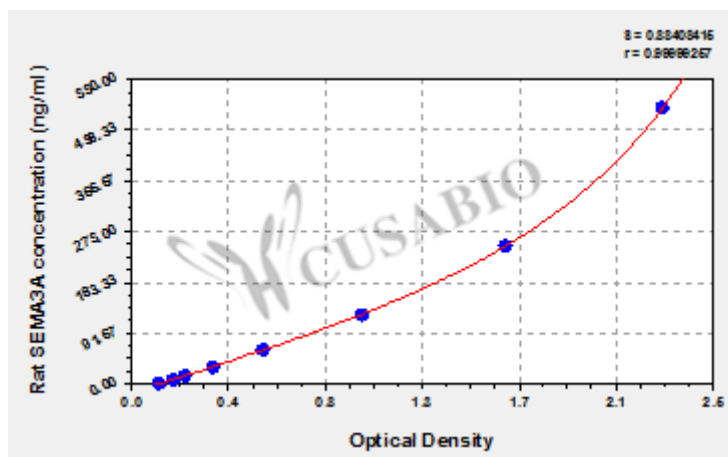
Recovery

The recovery of rat SEMA3A spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	85	80-91
EDTA plasma (n=4)	92	87-96

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average Corrected	
500	2.324	2.254	2.289	2.156
250	1.677	1.555	1.616	1.483
125	1.019	0.979	0.999	0.866
62.5	0.582	0.570	0.576	0.443
31.2	0.367	0.363	0.365	0.232
15.6	0.243	0.239	0.241	0.108
7.8	0.194	0.188	0.191	0.058
0	0.134	0.132	0.133	?

Msds

```
{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL020980RA.pdf","filename":"MSDS"}}
```