



Mouse soluble receptor activator of nuclear factor- κ B ligand,sRANKL ELISA Kit

Product Code	CSB-E05127m
Abbreviation	TNFSF11
Protein Biological Process 1	Developmental Protein
Uniprot No.	O35235
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates.
Detection Range	12.5 pg/ml-800 pg/ml.
Sensitivity	3.12 pg/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	Tnfsf11
Tag Info	quantitative
Protein Description	Sandwich

Description

The product CSB-E05127m is a sandwich ELISA kit developed to measure levels of mouse soluble receptor activator of nuclear factor- κ B ligand (sRANKL) in serum, plasma, cell culture supernates, or tissue homogenates. The enzyme-substrate chromogenic reaction is also used to amplify the signal and quantify the levels of the analyte through the intensity of the colored product. The color intensity positively correlates with the amount of sRANKL bound in the initial step.

RANKL also called TNFSF11, is a multifunctional TNF-like cytokine that plays an important role in bone homeostasis and lymphoid tissue formation. It is essential for osteoclast differentiation and survival. RANKL exerts these functions through its receptor RANK. Studies have shown that mice lacking RANKL cannot produce osteoclasts, which results in a lack of bone resorption and a severely osteopetrotic phenotype. In addition to impaired bone resorption, lack of the RANKL also leads to defects in B-cell lymphopoiesis and mammary gland and lymph node development. Defects in RANKL-null mice revealed



RANKL's diverse roles in organ development, immune function, and skeletal remodeling.

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 mouse sRANKL 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)
	Average %	90
1:100	Range %	86-93
	Average %	103
1:200	Range %	99-105
	Average %	94
1:400	Range %	88-97
	Average %	97
1:800	Range %	92-100

Recovery

The recovery of mouse sRANKL 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)	95	89-97	
EDTA plasma (n=4)	95	91-98	

Msds

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