



Rat proteoglycan 4(PRG4) ELISA kit

Product Code	CSB-E14125r
Abbreviation	PRG4
Target Name	proteoglycan 4(PRG4)
Uniprot No.	Q6W5G4
Alias	GS1-174L6.2, CACP, FLJ32635, HAPO, JCAP, MSF, SZP, bG174L6.2, OTTHUMP00000033580 articular superficial zone protein bG174L6.2 (MSF: megakaryocyte stimulating factor) lubricin megakaryocyte stimulat
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	1.56 ng/mL-100 ng/mL
Sensitivity	0.39 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	Others
Gene Names	Plppr2
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat PRG4 ELISA Kit was designed for the quantitative measurement of Rat PRG4 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 1.56 ng/mL-100 ng/mL and the sensitivity is 0.39 ng/mL.
Target Details	This protein is a large proteoglycan specifically synthesized by chondrocytes located at the surface of articular cartilage, and also by some synovial lining cells. This protein contains both chondroitin sulfate and keratan sulfate glycosaminoglycans. It functions as a boundary lubricant at the cartilage surface and contributes to the elastic absorption and energy dissipation of synovial fluid. Mutations in this gene result in camptodactyly-arthritis-coxa vara-pericarditis syndrome. Multiple transcript variants encoding different isoforms have been found for this gene.
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 PRG4 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 %	91
	Range %	88-95
1:2	Average %	96
	Range %	92-101
1:4	Average %	102
	Range %	99-103
1:8	Average %	87
	Range %	82-93

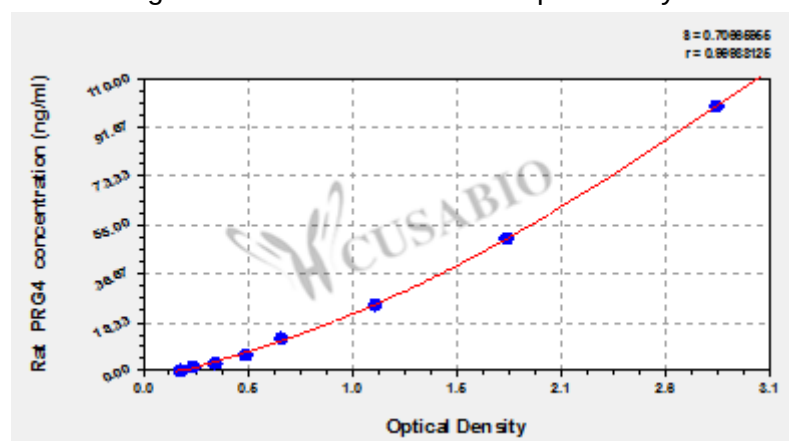
Recovery

The recovery of rat PRG4 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)	90	87-94
EDTA plasma (n=4)	101	98-105

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
100	2.721	2.888	2.805	2.610
50	1.806	1.765	1.786	1.591
25	1.154	1.140	1.147	0.952
12.5	0.702	0.678	0.690	0.495
6.25	0.512	0.520	0.516	0.321
3.12	0.368	0.362	0.365	0.170
1.56	0.264	0.256	0.260	0.065
0	0.192	0.198	0.195	

Msds

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