

Mouse OPN Antibody Pair Set

Catalog No.	E-KAB-0333	Applications	ELISA
Synonyms	SPP1, BNSP, BSP1, ETA-1, Bone Sialoprotein I, Secreted Phosphoprotein 1, Early T-Lymphocyte Activation 1		

Kit components & Storage

Title	Specifications	Storage
Mouse OPN Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Mouse OPN Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

Note: Centrifuge before opening to ensure complete recovery of vial contents.

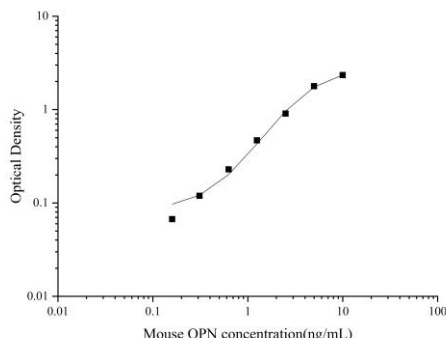
Product Information

Items		Characteristic (E-KAB-0333)	
		Mouse OPN Capture Antibody	Mouse OPN Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse OPN protein	Recombinant Mouse OPN protein
	Swissprot	P10923	
Product details	Reactivity	Mouse	Mouse
	Host	Goat	Goat
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Antigen Affinity	Antigen Affinity
	Specificity	Detects Mouse OPN in ELISAs.	

For Research Use Only

Applications

Mouse OPN Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Mouse OPN Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Mouse OPN concentration (ng/mL). The x-axis ranges from 0.01 to 100 ng/mL, and the y-axis ranges from 0.01 to 10. The data points show a clear upward trend, indicating that as the concentration of Mouse OPN increases, the optical density also increases. The curve is approximately linear on this log-log scale, suggesting a power-law relationship between the two variables.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Mouse OPN concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.1</td> <td>0.05</td> </tr> <tr> <td>0.2</td> <td>0.1</td> </tr> <tr> <td>0.5</td> <td>0.2</td> </tr> <tr> <td>1</td> <td>0.4</td> </tr> <tr> <td>2</td> <td>0.8</td> </tr> <tr> <td>5</td> <td>1.5</td> </tr> <tr> <td>10</td> <td>2.5</td> </tr> </tbody> </table>	Mouse OPN concentration (ng/mL)	Optical Density	0.1	0.05	0.2	0.1	0.5	0.2	1	0.4	2	0.8	5	1.5	10	2.5
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ELISA Detection	1:1000-1:10000	Mouse OPN Detection Antibody (Biotin)																	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

The protein encoded by this gene is involved in the attachment of osteoclasts to the mineralized bone matrix. The encoded protein is secreted and binds hydroxyapatite with high affinity. The osteoclast vitronectin receptor is found in the cell membrane and may be involved in the binding to this protein. This protein is also a cytokine that upregulates expression of interferon-gamma and interleukin-12. Several transcript variants encoding different isoforms have been found for this gene.