

Mouse IGFBP-5 Antibody Pair Set

Catalog No. E-KAB-0299

Applications

ELISA

Synonyms IBP5

Kit components & Storage

Title	Specifications	Storage
Mouse IGFBP-5 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Mouse IGFBP-5 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-0299)	
		Mouse IGFBP-5 Capture Antibody	Mouse IGFBP-5 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse IGFBP-5 protein	Recombinant Mouse IGFBP-5 protein
	Swissprot	Q07079	
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 IGFBP-5 in ELISAs.	

Applications

Mouse IGFBP-5 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Mouse IGFBP-5 Capture Antibody	<table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Mouse IGFBP-5 concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>0.05</td> </tr> <tr> <td>200</td> <td>0.1</td> </tr> <tr> <td>500</td> <td>0.2</td> </tr> <tr> <td>1000</td> <td>0.4</td> </tr> <tr> <td>2000</td> <td>0.8</td> </tr> <tr> <td>5000</td> <td>1.5</td> </tr> <tr> <td>10000</td> <td>2.5</td> </tr> </tbody> </table>	Mouse IGFBP-5 concentration (pg/mL)	Optical Density	100	0.05	200	0.1	500	0.2	1000	0.4	2000	0.8	5000	1.5	10000	2.5
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ELISA Detection	1:1000-1:10000	Mouse IGFBP-5 Detection Antibody (Biotin)																	

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

Background

The superfamily of insulin-like growth factor (IGF) binding proteins include the six high-affinity IGF binding proteins (IGFBP) and at least four additional low-affinity binding proteins referred to as IGFBP related proteins (IGFBP-rP). All IGFBP superfamily members are cysteine-rich proteins with conserved cysteine residues, which are clustered in the amino- and carboxy-terminal thirds of the molecule. IGFBPs modulate the biological activities of IGF proteins. Some IGFBPs may also have intrinsic bioactivity that is independent of their ability to bind IGF proteins. Post-translational modifications of IGFBPs, including glycosylation, phosphorylation and proteolysis, have been shown to modify the affinities of the binding proteins to IGF.

Mouse IGFBP-5 cDNA encodes a 271 amino acid (aa) residue precursor protein with a putative 19 aa residue signal peptide that is processed to generate the 252 aa residue mature protein. Mouse, human and rat IGFBP-5 share 97% identity. IGFBP-5 is expressed by fibroblasts, myoblasts and osteoblasts, making it the predominant IGFBP found in bone extracts. IGFBP-5 has a strong affinity for hydroxyapatite, allowing it to bind to bone cells. When bound to extracellular matrix, IGFBP-5 is protected from proteolysis and potentiates IGF activity, but when it is soluble, IGFBP-5 is cleaved to a biologically inactive 21 kDa fragment.