Mouse IGFBP-3 Antibody Pair Set

Catalog No. E-KAB-0323 **Applications** ELISA
Synonyms IGFBP3, BP-53, IBP3

Kit components & Storage

Title	Specifications	Storage
Mouse IGFBP-3 Capture Antibody	1 vial, 100 μ g	Store at -20℃ for one year. Avoid freeze / thaw cycles.
Mouse IGFBP-3 Detection Antibody (Biotin)	1 vial, 50 μL	Store at -20℃ for one year. Avoid freeze / thaw cycles.

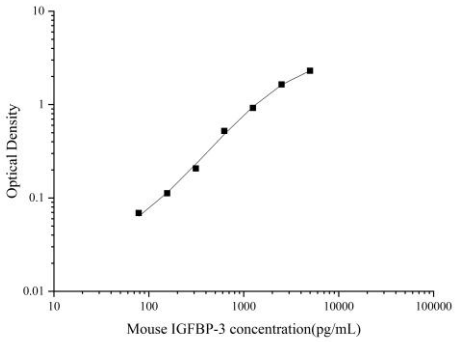
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0323)	
		Mouse IGFBP-3 Capture Antibody	Mouse IGFBP-3 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse IGFBP-3 protein	Recombinant Mouse IGFBP-3 protein
	Swissprot	P47878	
Product details	Reactivity	Mouse	Mouse
	Host	Rat	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	Protein A or G	Antigen Affinity
	Specificity	Detects Mouse IGFBP-3 in ELISAs.	

Applications

Mouse IGFBP-3 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4μg/mL	Mouse IGFBP-3 Capture Antibody	
ELISA Detection	1:1000-1:10000	Mouse IGFBP-3 Detection Antibody (Biotin)	

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

Background

The Insulin-like Growth Factor (IGF) signaling system plays a central role in cellular growth,differentiation,and proliferation. IGFBP3 is the most abundant IGF binding protein in human serum and is a growth inhibitory,apoptosis-inducing molecule,capable of acting via IGF-dependent and IGF-independent mechanisms. It appears to function both by cell cycle blockade and the induction of apoptosis. IGFBP3 can be transported to the nucleus by an importin beta mediated mechanism,where it has been shown to interact with the retinoid X receptor alpha and possibly other nuclear elements. IGFBP3 antiproliferative signaling appears to require an active transforming growth factor-beta (TGF-beta) signaling pathway,and IGFBP3 stimulates phosphorylation of the TGF-beta signaling intermediates Smad2 and Smad3. IGFBP3 has IGF-independent roles in inhibiting cell proliferation in cancer cell lines. Nuclear transcription factor,retinoid X receptor (RXR)-alpha,and IGFBP3 functionally interact to reduce prostate tumor growth and prostate-specific antigen in vivo. Several clinical studies have proposed that individuals with IGFBP3 levels in the upper range of normal may have a decreased risk for certain common cancers. This includes evidence of a protective effect against breast cancer,prostate cancer,colorectal cancer,and lung cancer. Moreover,IGFBP3 inhibits insulin-stimulated glucose uptake into adipocytes independent of IGF.