

IGFBP-3 Monoclonal Antibody(Capture)

catalog number: AN001520P

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

Description

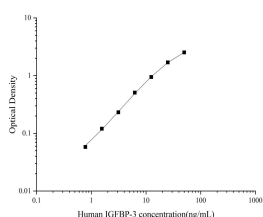
Reactivity	Human
Immunogen	Recombinant Human IGFBP-3 Protein expressed by Mammalian
Host	Mouse
Isotype	Mouse IgG1
Clone	13G2
Purification	Protein A/G Purification
Conjugation	Unconjugated
Buffer	Phosphate buffered solution, pH 7.2, containing 0.05% proclin 300.

Applications

Recommended Dilution

ELISA Capture	2-8 µg/mL
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Data



Sandwich ELISA-Recombinant Human IGFBP-3 Protein standard curve. Background subtracted standard curve using IGFBP-3 antibody(AN001520P)(Capture), IGFBP-3 antibody(AN001530P)(Detector) in sandwich ELISA. The reference range value for Recombinant Human IGFBP-3 Protein is 0.78125-50 ng/mL.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

For Research Use Only

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.