

## IGFBP-5 Monoclonal Antibody(Capture)

**catalog number: AN001200P**

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

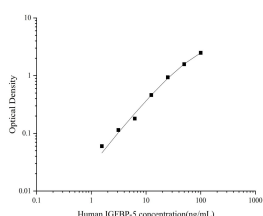
### Description

<b>Reactivity</b>	Human
<b>Immunogen</b>	Recombinant Human IGFBP-5 protein expressed by E.coli
<b>Host</b>	Mouse
<b>Isotype</b>	Mouse IgG2b
<b>Clone</b>	8F12
<b>Purification</b>	Protein A/G Purification
<b>Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.05% proclin 300.

### Applications Recommended Dilution

<b>ELISA Capture</b>	2-8 µg/mL
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### Data



Sandwich ELISA-Recombinant Human IGFBP-5 protein standard curve. Background subtracted standard curve using IGFBP-5 antibody(AN001200P)(Capture), IGFBP-5 antibody(AN001210P)(Detector) in sandwich ELISA. The reference range value for Recombinant Human IGFBP-5 protein is 1.5625-100 ng/mL.

### Preparation & Storage

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

### Background

### For Research Use Only

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.

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