

Active Recombinant Rat Igfbp1 protein, His-tagged

Cat. No. Igfbp1-988R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Rat Igfbp1 protein(P21743)(26~272 aa), fused with N-terminal His tag, was expressed in HEK293.
Species	Rat
Source	HEK293
ProteinLength	26-272 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Insulin Like Growth Factor Binding Protein 1 (IGFBP1) is a member of the IGFBP family that binds to insulin-like growth factors (IGFs) with high affinity. IGFBP1 plays a crucial role in regulating the biological activities of IGFs, which are important for growth and development. IGFBP1 is primarily produced in the liver and is also secreted by various other tissues, including the decidua of the uterus during pregnancy. Its levels in the bloodstream are influenced by factors such as nutritional status, insulin levels, and growth hormone. To detect the activity of recombinant IGFBP1, a functional ELISA assay was conducted to detect the interaction of recombinant rat IGFBP1 and recombinant human Insulin Like Growth Factor 1 (IGF1). Briefly, IGFBP1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to IGF1-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with

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anti-IGFBP1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant rat IGFBP1 and recombinant human IGF1 was shown, the EC50 for this effect is 0.222ug/mL.

Molecular Mass	31.3kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	lgfbp1 insulin-like growth factor binding protein 1 [Rattus norvegicus]
Official Symbol	lgfbp1
Synonyms	IGFBP1; insulin-like growth factor binding protein 1; insulin-like growth factor-binding protein 1; IBP-1; IGFBP-1; placental protein 12; IGF-binding protein 1; IBP1; IGFBPA; IGF-BP25;
Gene ID	25685

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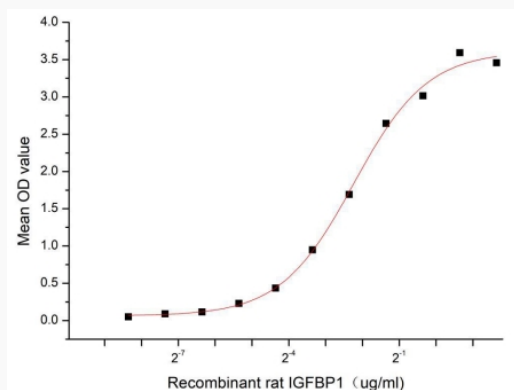
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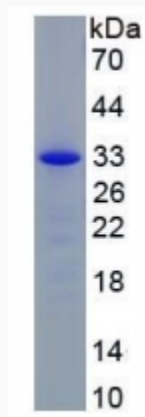
mRNA Refseq [NM_013144](#)

Protein Refseq [NP_037276](#)

Activity



SDS-PAGE



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