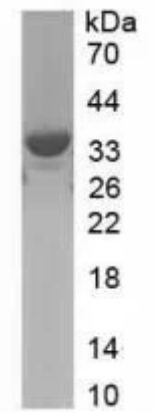
Active Insulin Like Growth Factor Binding Protein 3 (IGFBP3)

Catalog#:PEH12087

概述（Summary）

别称（Alternative Names）	BP53; IBP3; Growth Hormone-Dependent Binding Protein; Acid Stable Subunit Of The 140 K IGF Complex
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gly135-Thr277】
Accession #	P17936
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	30.0 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	IGF-binding proteins prolong the half-life of the IGFs and have been shown to either inhibit or stimulate the growth promoting effects of the IGFs on cell culture. They alter the interaction of IGFs with their cell surface receptors. Also exhibits IGF-independent antiproliferative and apoptotic effects mediated by its receptor TMEM219/IGFBP-3R. Inhibits the positive effect of humanin on insulin sensitivity. Promotes testicular germ cell apoptosis.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

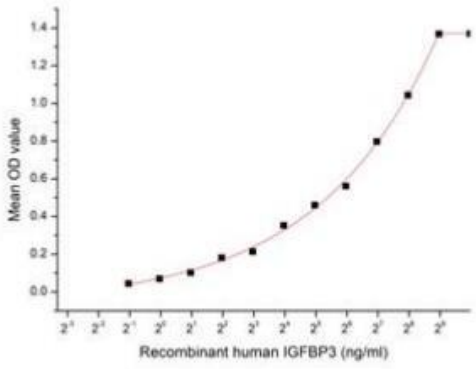


Figure 1. The binding activity of IGFBP3 with FN

Insulin-like growth factor-binding protein 3, also known as IGFBP3 is one of six IGF binding proteins (IGFBP1 to IGFBP6) that have highly conserved structures and bind the insulin-like growth factors IGF-1 and IGF-2 with high affinity. Within tissues, IGFBP3 can bind IGF1 and IGF2 released by many cell types, and block their access to the IGF-1 receptor (IGF1R), which is activated by both IGFs. IGFBP3 also interacts with cell-surface proteins, affecting cell signaling from outside the cell or after internalization, and also enters the cell nucleus where it binds to nuclear hormone receptors and other ligands. Besides, Fibronectin (FN) has been identified as an interactor of IGFBP3, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IGFBP3 and recombinant human FN. Briefly, IGFBP3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100ul were then transferred to FN-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-IGFBP3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution , wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of IGFBP3 and FN was shown in Figure 1, the EC50 was 78 ng/ml.

注意事项（Note）

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