**BACKGROUND**

The Insulin-like growth factor-binding proteins, or IGFBPs, are a family of homologous proteins that have co-evolved with the IGFs. They serve not only as shuttle molecules for the soluble IGFs, but also confer a level of regulation to the IGF signaling system. Physical association of the IGFBPs with IGF influences the bio-availability of the growth factors, as well as their concentration and distribution in the extracellular environment. In addition, the IGFBPs appear to have biological activity independent of the IGFs. Seven IGFBPs have thus far been described, each differing in their tissue distribution, half-lives and modulation of IGF interactions with their receptors. For instance, IGFBP-1 is negatively regulated by Insulin production. The IGFBP-1 gene is expressed at a high level during fetal liver development and in response to nutritional changes and diabetes. The 1.4 kDa IGFBP-2 has been suggested to function as a chaperone, escorting IGFs to their target tissues. It is expressed in several human tissues including fetal eye and fetal brain. IGFBP-3 is the most abundant IGFBP and is complexed with roughly 80% of the serum IGFs. Both IGFBP-3 and IGFBP-4 are released by dermal fibroblasts in response to incision injury. IGFBP-5 is secreted by myoblasts and may play a key role in muscle differentiation. IGFBP-6 differs from other IGFBPs in having the highest affinity for IGF-II. Glycosylated human IGFBP-6 is expressed in Chinese hamster ovary (CHO) cells, whereas nonglycosylated recombinant human IGFBP-6 is expressed in E.coli. IGFBP-7 is a secreted protein and binds both IGF-I and IGF-II with a relatively low affinity. It stimulates prostacyclin production and may also function as a growth-suppressing factor.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: IGFBP6 (human) mapping to 12q13.13; Igfbp6 (mouse) mapping to 15 F3.

**SOURCE**

IGFBP6 (H-70) is a rabbit polyclonal antibody raised against amino acids 171-240 of IGFBP6 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

IGFBP6 (H-70) is recommended for detection of precursor and mature IGFBP6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IGFBP6 (H-70) is also recommended for detection of precursor and mature IGFBP6 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for IGFBP6 siRNA (h): sc-37231 and IGFBP6 siRNA (m): sc-37232.

Molecular Weight of IGFBP6: 29 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2286 or human kidney tumor.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2033 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

![Western blot analysis of IGFBP6 expression in non-transfected: sc-120969 (B) and mouse IGFBP6 transfected: sc-129869 (B) 293T whole cell lysates.](Image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.