

IGFBP2 (C-18): sc-6001

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. It has been suggested that IGFBP2 functions as chaperone, escorting IGFs to their target tissues. It is expressed in several human tissues including fetal eye and fetal brain.

CHROMOSOMAL LOCATION

Genetic locus: IGFBP2 (human) mapping to 2q35; Igfbp2 (mouse) mapping to 1 C3.

SOURCE

IGFBP2 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IGFBP2 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.

Blocking peptide available for competition studies, sc-6001 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IGFBP2 (C-18) is recommended for detection of precursor and mature IGFBP2 of human and, to a lesser extent, mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IGFBP2 (C-18) is also recommended for detection of precursor and mature IGFBP2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for IGFBP2 siRNA (h): sc-37195, IGFBP2 siRNA (m): sc-39586, IGFBP2 shRNA Plasmid (h): sc-37195-SH, IGFBP2 shRNA Plasmid (m): sc-39586-SH, IGFBP2 shRNA (h) Lentiviral Particles: sc-37195-V and IGFBP2 shRNA (m) Lentiviral Particles: sc-39586-V.

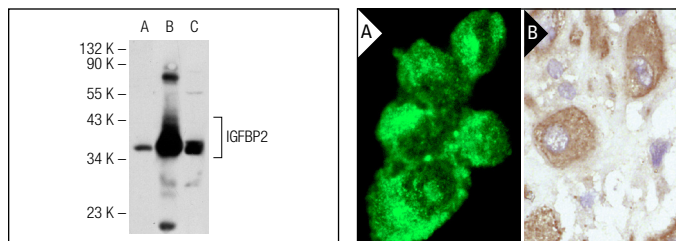
Molecular Weight of IGFBP2: 36 kDa.

Positive Controls: T98G cell lysate: sc-2294 or MES-SA/Dx5 cell lysate: sc-2284.

STORAGE

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

DATA



IGFBP2 (C-18): sc-6001. Western blot analysis of IGFBP2 expression in non-transfected 293T: sc-117752 (A), mouse IGFBP2 transfected 293T: sc-120966 (B) and T98G (C) whole cell lysates.

IGFBP2 (C-18): sc-6001. Immunofluorescence staining of methanol-fixed MIA PaCa-2 cells showing cytoplasmic localization (A) and immunoperoxidase staining of formalin-fixed, paraffin-embedded human placenta (B).

SELECT PRODUCT CITATIONS

- Allander, S.V., et al. 2002. Expression profiling of synovial sarcoma by cDNA microarrays: association of ERBB2, IGFBP2, and ELF3 with epithelial differentiation. *Am. J. Pathol.* 161: 1587-1595.
- Moore, L.M., et al. 2009. IGFBP2 is a candidate biomarker for Ink4a-Arf status and a therapeutic target for high-grade gliomas. *Proc. Natl. Acad. Sci. USA* 106: 16675-16679.
- Santosh, V., et al. 2010. Grade-specific expression of Insulin-like growth factor-binding proteins-2, -3, and -5 in astrocytomas: IGFBP-3 emerges as a strong predictor of survival in patients with newly diagnosed glioblastoma. *Cancer Epidemiol. Biomarkers Prev.* 19: 1399-1408.
- Migita, T., et al. 2010. Role of Insulin-like growth factor binding protein 2 in lung adenocarcinoma: IGF-independent antiapoptotic effect via caspase-3. *Am. J. Pathol.* 176: 1756-1766.
- Skrtic, A., et al. 2011. Immunohistochemical localization of CD31, NOTCH1 and JAGGED1 proteins in experimentally induced polycystic ovaries of immature rats. *Acta Histochem.* 113: 262-269.
- Doucette, T., et al. 2011. Bcl-2 promotes malignant progression in a PDGF-B-dependent murine model of oligodendroglioma. *Int. J. Cancer* 129: 2093-2103.
- Kulkarni, A., et al. 2012. Expression pattern and prognostic significance of IGFBP isoforms in anaplastic astrocytoma. *Pathol. Oncol. Res.* 18: 961-967.

RESEARCH USE

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

MONOS
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Try **IGFBP2 (C-10): sc-25285** or **IGFBP2 (G-4): sc-515134**, our highly recommended monoclonal alternatives to IGFBP2 (C-18).