

IGFBP2 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1169a

Specification

IGFBP2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype **Description** WB, IHC, E <u>P18065</u> Human Mouse Monoclonal IgG1

IGFBP2: insulin-like growth factor binding protein 2. IGFBP2 is a member of the ISGBP family which bind various IGFs. IGFBP2 is overexpressed in a wide spectrum of other cancers, including glioma, prostate cancer, synovial sarcoma, neuroblastoma, colon cancer, adrenocortical cancer, lung cancer, Wilms' tumor, and hepatoblastoma. The overexpression of IGFBP2 also correlates with the aggressiveness of some tumors. IGFBP2 activates the expression of matrix metalloprotease 2, which contributes to cell invasiveness.

Immunogen Purified recombinant fragment of protein IGFBP2 (aa180-328) expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

IGFBP2 Antibody - Additional Information

Gene ID 3485

Other Names Insulin-like growth factor-binding protein 2, IBP-2, IGF-binding protein 2, IGFBP-2, IGFBP2, BP2, IBP2

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions IGFBP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IGFBP2 Antibody - Protein Information



Name IGFBP2

Synonyms BP2, IBP2

Function

Multifunctional protein that plays a critical role in regulating the availability of IGFs such as IGF1 and IGF2 to their receptors and thereby regulates IGF-mediated cellular processes including proliferation, differentiation, and apoptosis in a cell-type specific manner (PubMed:18563800, PubMed:18563800, PubMed:38796567). Functions coordinately with receptor protein tyrosine phosphatase beta/PTPRB and the IGF1 receptor to regulate IGF1-mediated signaling by stimulating the phosphorylation of PTEN leading to its inactivation and AKT1 activation (PubMed:22869525). Plays a positive role in cell migration via interaction with integrin alpha5/ITGA5 through an RGD motif (PubMed:16569642). Additionally, interaction with ITGA5/ITGB1 enhances the adhesion of endothelial progenitor cells to endothelial cells (PubMed:<a href="http://www.uniprot.org/citations/26076738"

target="_blank">26076738). Upon mitochondrial damage, facilitates apoptosis with ITGA5 of podocytes, and then activates the phosphorylation of focal adhesion kinase (FAK)-mediated mitochondrial injury (PubMed:38796567).

Cellular Location Secreted

IGFBP2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

IGFBP2 Antibody - Images



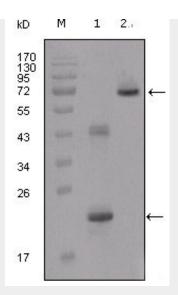


Figure 1: Western blot analysis using IGFBP2 mouse mAb against truncated IGFBP2-His recombinant protein (1) and truncated IGFBP2 (aa40-328)-hIgGFc transfected CHO-K1 cell lysate (2).

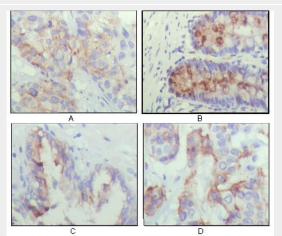


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (A), recturn(B), prostate (C), colon cancer (D) showing cytoplasmic localization using IGFBP2 mouse mAb with DAB staining.

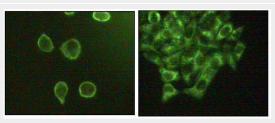


Figure 2: Immunofluorescence staining of methanol-fixed A431 (left) and Hela (right) cells showing cytoplasmic and membrane localization.

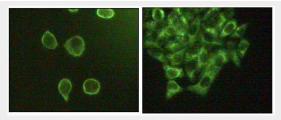




Figure 2: Immunofluorescence staining of methanol-fixed A431(left) and Hela(right) cells showing cytoplasmic and membrane localization.

IGFBP2 Antibody - References

1. Oncol Rep. 2005 Feb;13(2):341-5. 2. Prostate. 2005 Jun 15;64(1):9-19. 3. Bone. 2005 Dec;37(6):741-50.