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IGFBP2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1169a

Product Information

Application	WB, IHC, E
Primary Accession	P18065
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1F6F6
Isotype	IgG1
Calculated MW	34814
Description	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.

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.

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: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: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

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.

Images

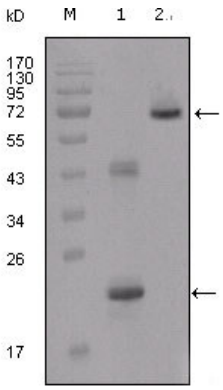


Figure 1: Western blot analysis using IGFBP2 mouse mAb against truncated IGFBP2-His recombinant protein (1) and truncated IGFBP2 (aa40-328)-hIgGFc transfected CHO-K1 cell lysate (2).

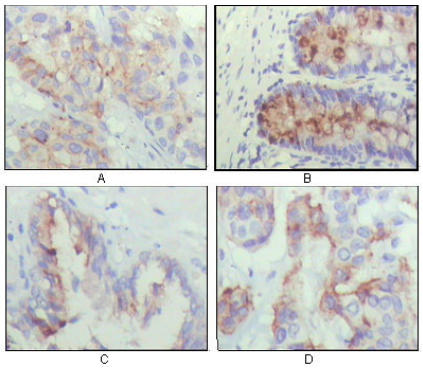
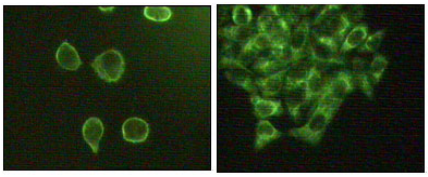


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (A), recturn(B), prostate (C), colon cancer (D) showing cytoplasmic localization using IGFBP2 mouse mAb with DAB staining.

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



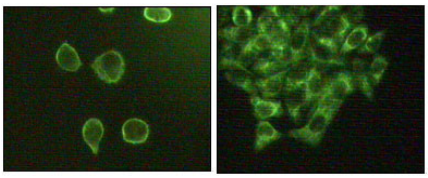


Figure 2: Immunofluorescence staining of methanol-fixed A431(left) and Hela(right) cells showing cytoplasmic and membrane localization.

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