

IGF2BP3 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1481a

Product Information

ApplicationWB, IHC, EPrimary Accession000425ReactivityHumanHostMouseClonalityMonoclonalClone Names8F11

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Description The protein encoded by this gene is primarily found in the nucleolus, where it

can bind to the 5' UTR of the insulin-like growth factor II leader 3 mRNA and

may repress translation of insulin-like growth factor II during late

development. The encoded protein contains several KH domains, which are important in RNA binding and are known to be involved in RNA synthesis and metabolism. Tissue specificity: Expressed in fetal liver, fetal lung, fetal kidney, fetal thymus, fetal placenta, fetal follicles of ovary and gonocytes of testis, growing oocytes, spermatogonia and semen (at protein level). Expressed in cervix adenocarcinoma, in testicular, pancreatic and renal-cell carcinomas (at protein level). Expressed ubiquitously during fetal development at 8 and 14 weeks of gestation. Expressed in ovary, testis, brain, placenta, pancreatic cancer tissues and pancreatic cancer cell lines .IMP-3 is a marker for

carcinomas and high-grade dysplastic lesions of pancreatic ductal epithelium.

Immunogen Purified recombinant fragment of human IGF2BP3 expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID 10643

Other Names Insulin-like growth factor 2 mRNA-binding protein 3, IGF2 mRNA-binding

protein 3, IMP-3, IGF-II mRNA-binding protein 3, KH domain-containing protein overexpressed in cancer, hKOC, VICKZ family member 3, IGF2BP3,

IMP3, KOC1, VICKZ3

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 IGF2BP3 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name IGF2BP3

Synonyms IMP3, KOC1, VICKZ3

Function RNA-binding factor that may recruit target transcripts to cytoplasmic

protein-RNA complexes (mRNPs). This transcript 'caging' into mRNPs allows mRNA transport and transient storage. It also modulates the rate and location at which target transcripts encounter the translational apparatus and shields them from endonuclease attacks or microRNA-mediated degradation. Preferentially binds to N6- methyladenosine (m6A)-containing mRNAs and increases their stability (PubMed:29476152). Binds to the 3'-UTR of CD44 mRNA and stabilizes it, hence promotes cell adhesion and invadopodia formation in cancer cells. Binds to beta-actin/ACTB and MYC transcripts. Increases MYC mRNA stability by binding to the coding region instability determinant (CRD) and binding is enhanced by m6A-modification of the CRD (PubMed:29476152). Binds to the 5'-UTR of the insulin-like growth factor 2

(IGF2) mRNAs.

Cellular Location Nucleus. Cytoplasm. Cytoplasm, P-body. Cytoplasm, Stress granule.

Note=Found in lamellipodia of the leading edge, in the perinuclear region, and beneath the plasma membrane. The subcytoplasmic localization is cell specific and regulated by cell contact and growth. Localized at the connecting piece and the tail of the spermatozoa. Colocalized with CD44 mRNA in RNP granules. In response to cellular stress, such as oxidative stress, recruited to

stress granules

Tissue Location Expressed in fetal liver, fetal lung, fetal kidney, fetal thymus, fetal placenta,

fetal follicles of ovary and gonocytes of testis, growing oocytes, spermatogonia and semen (at protein level) Expressed in cervix adenocarcinoma, in testicular, pancreatic and renal-cell carcinomas (at protein level). Expressed ubiquitously during fetal development at 8 and 14 weeks of gestation. Expressed in ovary, testis, brain, placenta, pancreatic

cancer tissues and pancreatic cancer cell lines.

References

1. Clin Cancer Res. 2008 Mar 15;14(6):1701-6. 2. Hepatology. 2008 Oct;48(4):1118-27.

Images

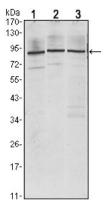


Figure 1: Western blot analysis using IGF2BP3 mouse mAb against Jurkat (1), K562 (2) and NTERA-2 (3) cell lysate.

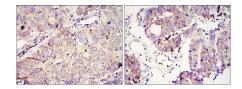


Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer (left) and colon tumour tissues (right) using IGC2BP3 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.