

IGF2BP3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1481a**Specification**

IGF2BP3 Antibody - Product Information

Application	WB, IHC
Primary Accession	O00425
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	69kDa KDa

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.

IGF2BP3 Antibody - 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

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.

IGF2BP3 Antibody - 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

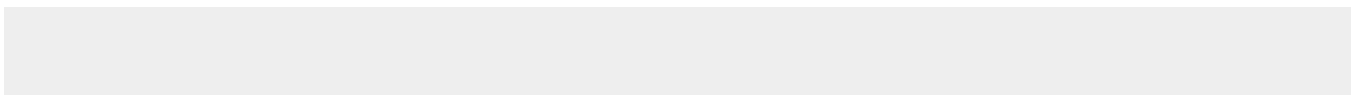
Expressed in fetal liver, fetal lung, fetal kidney, fetal thymus, fetal placenta, fetal follicles of ovary and gonocytes of testis, growing oocytes, spermatogonia and semen (at protein level) Expressed in cervix adenocarcinoma, in testicular, pancreatic and renal-cell carcinomas (at protein level). Expressed 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.

IGF2BP3 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IGF2BP3 Antibody - Images



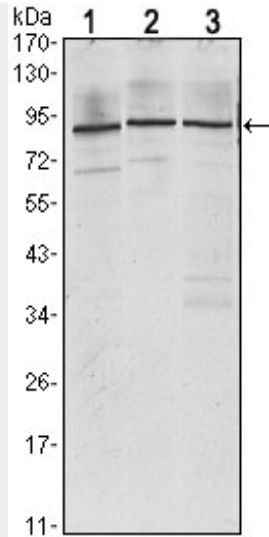


Figure 1: Western blot analysis using IGF2BP3 mouse mAb against Jurkat (1), K562 (2) and NTERA-2 (3) cell lysate.

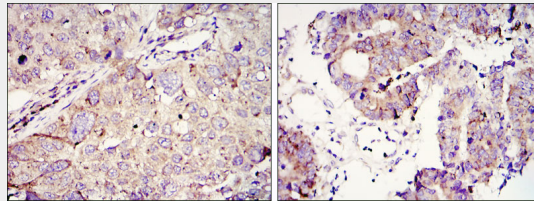


Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer (left) and colon tumour tissues (right) using IGC2BP3 mouse mAb with DAB staining.

IGF2BP3 Antibody - References

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