

IMP3 Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AP52795

Product Information

Application	WB
Primary Accession	O00425
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	63705

Additional Information

Gene ID	10643
Other Names	Cancer/testis antigen 98;CT98;DKFZp686F1078;hKOC;IF2B3_HUMAN;IGF II mRNA binding protein 3;IGF-II mRNA-binding protein 3;IGF2 mRNA binding protein 3;IGF2 mRNA-binding protein 3;IGF2BP3;IMP 3;IMP-3;Insulin like growth factor 2 mRNA binding protein 3;Insulin-like growth factor 2 mRNA-binding protein 3;KH domain containing protein overexpressed in cancer;KH domain-containing protein overexpressed in cancer;KOC 1;KOC1;VICKZ 3;VICKZ family member 3;VICKZ3.
Dilution	WB~~1:1000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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.

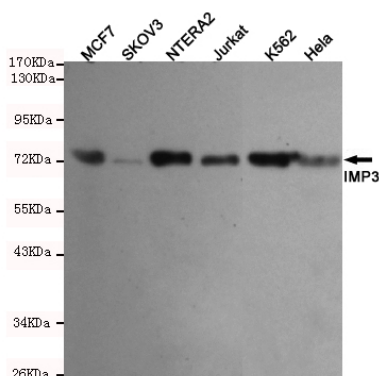
Background

RNA-binding factor that may recruits 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. 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. Binds to the 5'-UTR of the insulin-like growth factor 2 (IGF2) mRNAs.

References

Mueller-Pillasch F.,et al.Oncogene 14:2729-2733(1997).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Hillier L.W.,et al.Nature 424:157-164(2003).
Mueller-Pillasch F.,et al.Mech. Dev. 88:95-99(1999).
Nielsen J.,et al.Mol. Cell. Biol. 19:1262-1270(1999).

Images



Western blot detection of IMP3 in MCF7,SKOV3,NTERA2,Jurkat,Hela and K562 cell lysates using IMP3 mouse mAb (1:1000 diluted).Predicted band size:70KDa.Observed band size:70KDa.

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