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IMP3 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52795

Specification

IMP3 Antibody - Product Information

Application	**WB**
Primary Accession	O00425
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**70 KDa**

IMP3 Antibody - 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
Purified mouse monoclonal in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

IMP3 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:<a

href="http://www.uniprot.org/citations/29476152" target="_blank">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

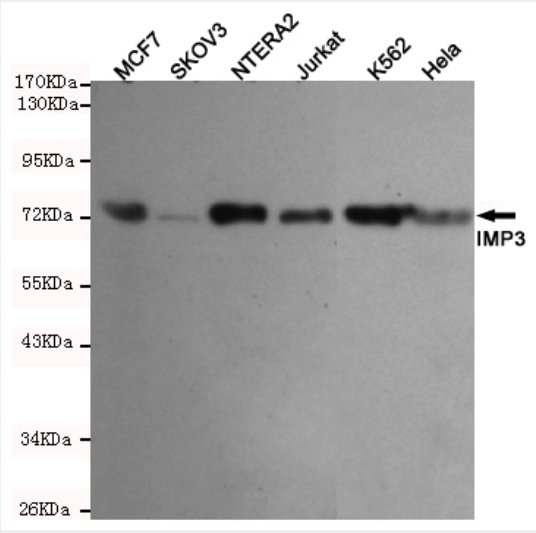
Tissue Location
Expressed in fetal liver, fetal lung, fetal kidney, fetal thymus, fetal placenta, fetal follicles of ovary and gonocytes of testis, growing oocytes, spermatogonia and semen (at protein level) Expressed in cervix adenocarcinoma, in testicular, pancreatic and renal-cell carcinomas (at protein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

IMP3 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 Cytomety
- Cell Culture

IMP3 Antibody - Images



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Western blot detection of IMP3 in MCF7,SKVO3,NTERA2,Jurkat,Hela and K562 cell lysates using IMP3 mouse mAb (1:1000 diluted).Predicted band size:70KDa.Observed band size:70KDa.

IMP3 Antibody - 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.

IMP3 Antibody - 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).