

IMP3 Antibody

Rabbit mAb Catalog # AP91715

Product Information

Application WB, IF, FC, ICC, IP

Primary Accession 000425

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names CT98; hKOC; IGF2BP3; IMP 3; KOC1; VICKZ 3;

IsotypeRabbit IgGHostRabbitCalculated MW63705

Additional Information

Dilution WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:50 FC 1:50

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human IMP3

(IGF2) mRNAs.

Description RNA-binding protein that act as a regulator of mRNA translation and stability.

Binds to the 5'-UTR of the insulin-like growth factor 2 (IGF2) mRNAs. Binds to

sequences in the 3'-UTR of CD44 mRNA.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

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

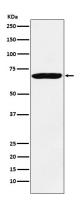
Cellular Location

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.

Images



Western blot analysis of IMP3 expression in HeLa cell lysate.

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