

Anti-IMP3 Antibody (1F1-E10-D11)

Mouse Monoclonal Antibody Catalog # ABV12066

### Specification

## Anti-IMP3 Antibody (1F1-E10-D11) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype WB <u>000425</u> Human Mouse Monoclonal Mouse IgG1

### Anti-IMP3 Antibody (1F1-E10-D11) - Additional Information

Gene ID 10643

Application & Usage

WB: MCF7, SKVO3, NTERA2, Jurkat, Hela and K562 cell lysates

**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

Target/Specificity IMP3

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** In PBS (pH 7.4) containing with 0.02% sodium azide and 50% glycerol

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

**Precautions** Anti-IMP3 Antibody (1F1-E10-D11) is for research use only and not for use in diagnostic or therapeutic procedures.



## Anti-IMP3 Antibody (1F1-E10-D11) - 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</a>). 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:<a href="http://www.uniprot.org/citations/29476152" target="\_blank">29476152" target="\_blank">29476152" target="\_blank">29476152</a> (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.

## Anti-IMP3 Antibody (1F1-E10-D11) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-IMP3 Antibody (1F1-E10-D11) - Images





Western blot detection of IMP3 in MCF7? SKV03, NTERA2, Jurkat, Heia and K562 cell lysates using IMP3 mouse mAb

# Anti-IMP3 Antibody (1F1-E10-D11) - Background

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. 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.