

### IMP-3 / IGF2BP3 Antibody (clone 8F11)

Mouse Monoclonal Antibody Catalog # ALS15711

## **Specification**

## IMP-3 / IGF2BP3 Antibody (clone 8F11) - Product Information

Application IHC
Primary Accession O00425
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 64kDa KDa

## IMP-3 / IGF2BP3 Antibody (clone 8F11) - 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

# Target/Specificity

Human IMP-3 / IGF2BP3

## **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

## **Precautions**

IMP-3 / IGF2BP3 Antibody (clone 8F11) is for research use only and not for use in diagnostic or therapeutic procedures.

#### IMP-3 / IGF2BP3 Antibody (clone 8F11) - 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</a>). 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.

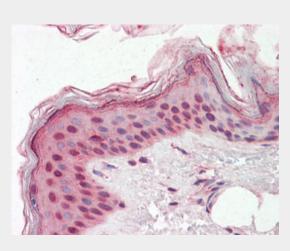
**Volume** 50 μl

## IMP-3 / IGF2BP3 Antibody (clone 8F11) - 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

## IMP-3 / IGF2BP3 Antibody (clone 8F11) - Images



Anti-IMP-3 / IGF2BP3 antibody IHC staining of human skin.

## IMP-3 / IGF2BP3 Antibody (clone 8F11) - Background

RNA-binding factor that may recruits target transcripts to cytoplasmic protein-RNA complexes





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(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.

# IMP-3 / IGF2BP3 Antibody (clone 8F11) - 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).