

### KD-Validated Anti-IGF2BP3 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1562

### **Specification**

# **KD-Validated Anti-IGF2BP3 Rabbit Monoclonal Antibody - Product Information**

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB, FC, ICC <u>000425</u> Human Monoclonal Rabbit IgG Predicted, 64 kDa , observed , 69 kDa KDa IGF2BP3 IGF2BP3; Insulin Like Growth Factor 2 MRNA Binding Protein 3; IMP-3; IMP3; CT98; Insulin-Like Growth Factor 2 MRNA-Binding Protein 3; IGF-II MRNA-Binding Protein 3; IGF2 MRNA-Binding Protein 3; Cancer/Testis Antigen 98; VICKZ Family Member 3; VICKZ3; KOC1; KH Domain Containing Protein Overexpressed In Cancer; KH Domain-Containing Protein 0verexpressed In Cancer; Insulin-Like Growth Factor 2 MRNA Binding Protein 3; IGF II MRNA
Immunogen	Binding Protein 3; HKOC; KOC A synthesized peptide derived from human IMP3

### KD-Validated Anti-IGF2BP3 Rabbit Monoclonal Antibody - 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

# KD-Validated Anti-IGF2BP3 Rabbit Monoclonal 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</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" target="\_blank">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.

# **KD-Validated Anti-IGF2BP3 Rabbit Monoclonal Antibody - Protocols**

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

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

### KD-Validated Anti-IGF2BP3 Rabbit Monoclonal Antibody - Images





Western blotting analysis using anti-IGF2BP3 antibody (Cat#AGI1562). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-IGF2BP3 antibody (Cat#AGI1562, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-IGF2BP3 antibody (Cat#AGI1562). IGF2BP3 expression in wild type (WT) and IGF2BP3 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-IGF2BP3 antibody (Cat#AGI1562, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of IGF2BP3 expression in HepG2 cells using IGF2BP3 antibody (Cat#AGI1562, 1:2,000). Green, isotype control; red, IGF2BP3.



Immunocytochemical staining of HepG2 cells with anti-IGF2BP3 antibody (Cat#AGI1562, 1:1,000). Nuclei were stained blue with DAPI; IGF2BP3 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.