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Anti-IMP3 IGF2BP3 Monoclonal Antibody
Catalog # ABO14629

Specification

Anti-IMP3 IGF2BP3 Monoclonal Antibody - Product Information

Application	**WB, IF, ICC, IP, FC**
Primary Accession	O00425
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-IMP3 IGF2BP3 Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-IMP3 IGF2BP3 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

Application Details
WB 1:500-1:2000
ICC/IF 1:50-1:200
IP 1:50
FC 1:50

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human IMP3 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.

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

Anti-IMP3 IGF2BP3 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: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.

Anti-IMP3 IGF2BP3 Monoclonal 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

Anti-IMP3 IGF2BP3 Monoclonal Antibody - Images

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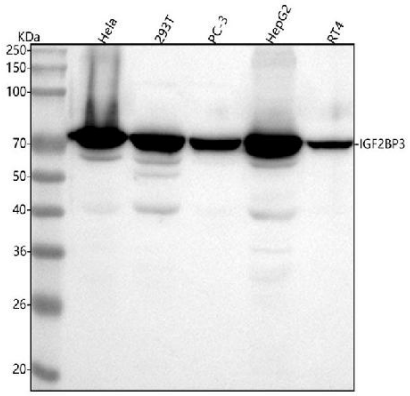

Figure 1. Western blot analysis of IGF2BP3 using anti-IGF2BP3 antibody (M02362-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human 293T whole cell lysates,
Lane 3: human PC-3 whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: human RT4 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-IGF2BP3 antigen affinity purified monoclonal antibody (Catalog # M02362-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for IGF2BP3 at approximately 72 kDa. The expected band size for IGF2BP3 is at 64 kDa.