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Anti-IMP2 Rabbit Monoclonal Antibody

Catalog # ABO15869

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	Q9Y6M1
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-IMP2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	10644
Other Names	Insulin-like growth factor 2 mRNA-binding protein 2, IGF2 mRNA-binding protein 2, IMP-2, Hepatocellular carcinoma autoantigen p62, IGF-II mRNA-binding protein 2, VICKZ family member 2, IGF2BP2, IMP2, VICKZ2
Calculated MW	66121
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200
Source	Eukaryota
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.
Clone Names	Clone: 24I46
Immunogen	A synthesized peptide derived from human IMP2
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.

Protein Information

Name	IGF2BP2
Synonyms	IMP2, VICKZ2

Function	RNA-binding factor that recruits 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 (By similarity). Preferentially binds to N6-methyladenosine (m6A)-containing mRNAs and increases their stability (PubMed:29476152). Binds to the 5'-UTR of the insulin-like growth factor 2 (IGF2) mRNAs (PubMed:9891060). Binding is isoform- specific. 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).
Cellular Location	Nucleus. Cytoplasm. Cytoplasm, P-body. Cytoplasm, Stress granule. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Localizes at the connecting piece and the tail of the spermatozoa. In response to cellular stress, such as oxidative stress, recruited to stress granules
Tissue Location	Expressed in oocytes, granulosa cells of small and growing follicles, Leydig cells, spermatogonia and semen (at protein level). Expressed in testicular cancer (at protein level). Expressed weakly in heart, placenta, skeletal muscle, bone marrow, colon, kidney, salivary glands, testis and pancreas. Detected in fetal liver, fetal ovary, gonocytes and interstitial cells of the testis

Images

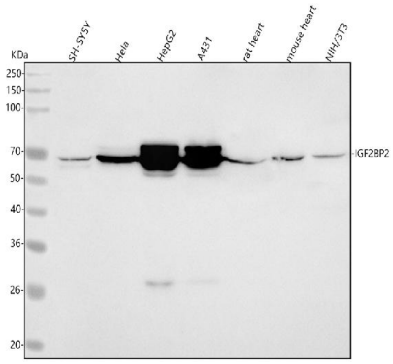
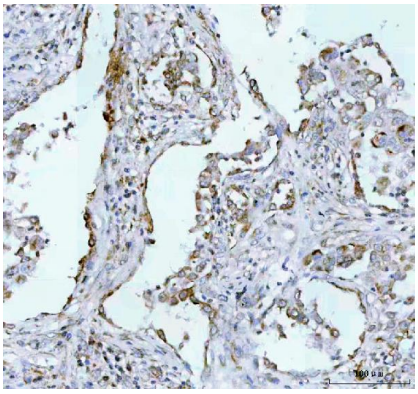


Figure 1. Western blot analysis of IMP2 using anti-IMP2 antibody (M02010-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.
The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human SH-SY5Y whole cell lysates,
Lane 2: human Hela whole cell lysates,
Lane 3: human HepG2 whole cell lysates,
Lane 4: human A431 whole cell lysates,
Lane 5: rat heart tissue lysates,
Lane 6: mouse heart tissue lysates,
Lane 7: mouse NIH/3T3 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-IMP2 antigen affinity purified monoclonal antibody (Catalog # M02010-1) 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 1:1000 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 IMP2 at approximately 66 kDa. The expected band size for IMP2 is at 66 kDa.

Figure 2. IHC analysis of IMP2 using anti-IMP2 antibody (M02010-1).



IMP2 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-IMP2 Antibody (M02010-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

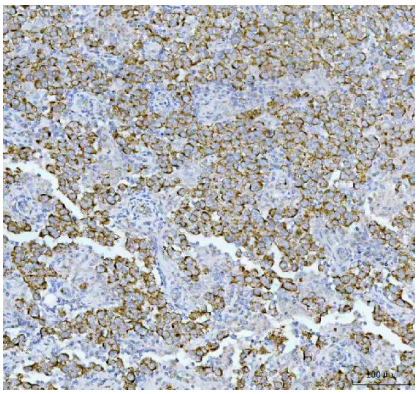


Figure 3. IHC analysis of IMP2 using anti-IMP2 antibody (M02010-1).
IMP2 was detected in a paraffin-embedded section of human testicular germ cell tumor tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-IMP2 Antibody (M02010-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.