


Product datasheet

Anti-IMP3 antibody [EPR12021] ab177477

KO VALIDATED Recombinant RabMAb

8 References 7 Images

Overview

Product name	Anti-IMP3 antibody [EPR12021]
Description	Rabbit monoclonal [EPR12021] to IMP3
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF, IP Unsuitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Recombinant fragment within Human IMP3 aa 1-250. The exact sequence is proprietary. Database link: O00425
Positive control	HeLa, BxPC-3 and 293T lysates; BxPC-3 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR12021

Isotype IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab177477 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		1/1000 - 1/5000. Detects a band of approximately 69 kDa (predicted molecular weight: 63 kDa).
ICC/IF		1/50 - 1/100.
IP		1/10 - 1/100.

Application notes Is unsuitable for IHC-P.

Target

Function 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.

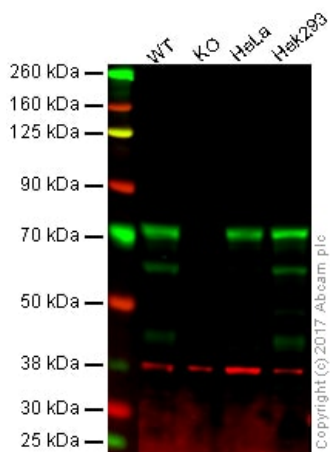
Tissue specificity Expressed in fetal liver, fetal lung, fetal kidney, fetal thymus, fetal placenta, fetal follicles of ovary and gonocytes of testis, growing oocytes, spermatogonia and semen (at protein level). Expressed in cervix adenocarcinoma, in testicular, pancreatic and renal-cell carcinomas (at 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.

Sequence similarities Belongs to the RRM IMP/VICKZ family.
Contains 4 KH domains.
Contains 2 RRM (RNA recognition motif) domains.

Domain The third and fourth KH domains are important for binding to the untranslated region (UTR) of target mRNA.

Cellular localization Nucleus. Cytoplasm. 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.

Images



Western blot - Anti-IMP3 antibody [EPR12021] (ab177477)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

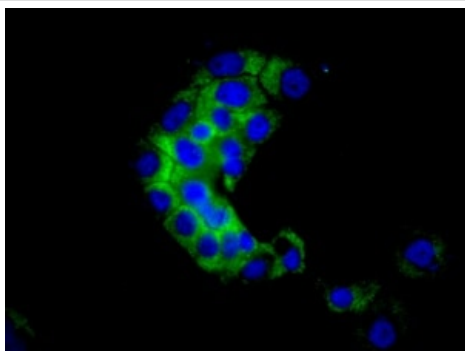
Lane 2: IGF2BP3 (IMP3) knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: HEK293 whole cell lysate (20 µg)

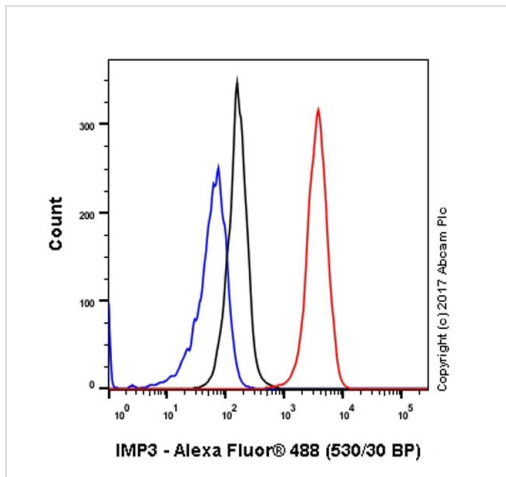
Lanes 1 - 4: Merged signal (red and green). Green - ab177477 observed at 70 kDa. Red - loading control, ab9484, observed at 37 kDa.

ab177477 was shown to specifically react with IGF2BP3 (IMP3) in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when IGF2BP3 (IMP3) knockout cells were examined. Wild-type and IGF2BP3 (IMP3) knockout samples were subjected to SDS-PAGE. Ab177477 and ab9484 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.



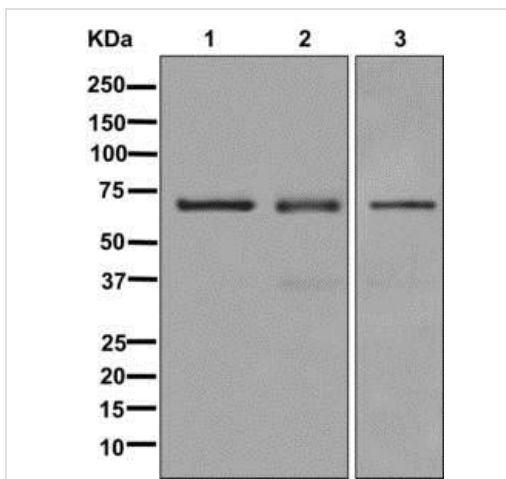
Immunocytochemistry/ Immunofluorescence - Anti-IMP3 antibody [EPR12021] (ab177477)

Immunofluorescent analysis of BxPC-3 cells labeling IMP3 with ab177477 at 1/50 (green) and DAPI staining (blue).



Flow Cytometry (Intracellular) - Anti-IMP3 antibody [EPR12021] (ab177477)

Intracellular Flow Cytometry analysis of BxPC-3 (human pancreas adenocarcinoma) cells labeling with purified ab177477 at 1/300 dilution (10ug/ml) (Red). Cells were fixed with 80% methanol and permeabilised with 0.1% Tween-20. A Goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) (ab172730) was used as a isotype control. Cell without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.



Western blot - Anti-IMP3 antibody [EPR12021] (ab177477)

All lanes : Anti-IMP3 antibody [EPR12021] (ab177477) at 1/1000 dilution

Lane 1 : HeLa lysate

Lane 2 : BxPC-3 lysate

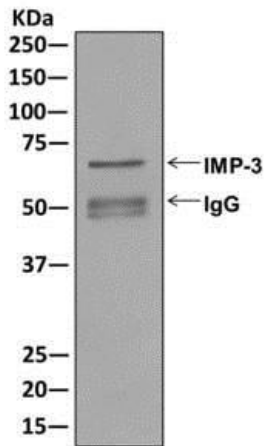
Lane 3 : 293T lysate

Lysates/proteins at 10 µg per lane.

Secondary

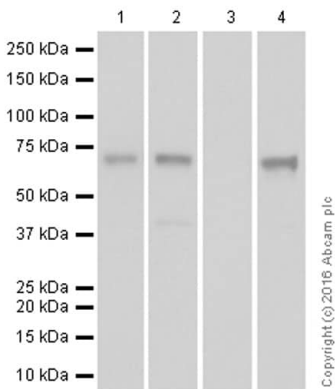
All lanes : HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 63 kDa



Immunoprecipitation - Anti-IMP3 antibody
[EPR12021] (ab177477)

Immunoprecipitation of IMP3 from 293T cell lysate using ab177477 at 1/10.



Western blot - Anti-IMP3 antibody [EPR12021]
(ab177477)

All lanes : Anti-IMP3 antibody [EPR12021] (ab177477) at 1/20000 dilution

Lane 1 : MDA-MB-231 (human breast adenocarcinoma) whole cell lysate

Lane 2 : MDA-MB-435S (human melanoma) whole cell lysate

Lane 3 : MCF-7 (human breast adenocarcinoma) whole cell lysate

Lane 4 : Human Fetal Kidney

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/2000 dilution

Predicted band size: 63 kDa

Observed band size: 69 kDa

Blocking/Diluting buffer 5% NFDm/TBST


The protein expression of IMP-3 in MCF-7 cells is negative or undetectable (PMID: 22266872).

Exposure time:

Lane 1: 10 seconds

Lane 2-4: 5 seconds

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-IMP3 antibody [EPR12021] (ab177477)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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