

Anti-GRB7 Antibody
Catalog # ABO10903**Specification**

Anti-GRB7 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	Q14451
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Growth factor receptor-bound protein 7(GRB7) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GRB7 Antibody - Additional Information

Gene ID 2886

Other Names

Growth factor receptor-bound protein 7, B47, Epidermal growth factor receptor GRB-7, GRB7 adapter protein, GRB7

Calculated MW

59681 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Cytoplasm. Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic granule . Cell projection. Predominantly cytoplasmic. Detected in stress granules, where mRNA is stored under stress conditions (By similarity). .

Protein Name

Growth factor receptor-bound protein 7

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human GRB7(124-141aa ARHVCEMLVQRAHALSDE), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the GRB7/10/14 family.

Anti-GRB7 Antibody - Protein Information

Name GRB7

Function

Adapter protein that interacts with the cytoplasmic domain of numerous receptor kinases and modulates down-stream signaling. Promotes activation of down-stream protein kinases, including STAT3, AKT1, MAPK1 and/or MAPK3. Promotes activation of HRAS. Plays a role in signal transduction in response to EGF. Plays a role in the regulation of cell proliferation and cell migration. Plays a role in the assembly and stability of RNA stress granules. Binds to the 5'UTR of target mRNA molecules and represses translation of target mRNA species, when not phosphorylated. Phosphorylation impairs RNA binding and promotes stress granule disassembly during recovery after cellular stress (By similarity).

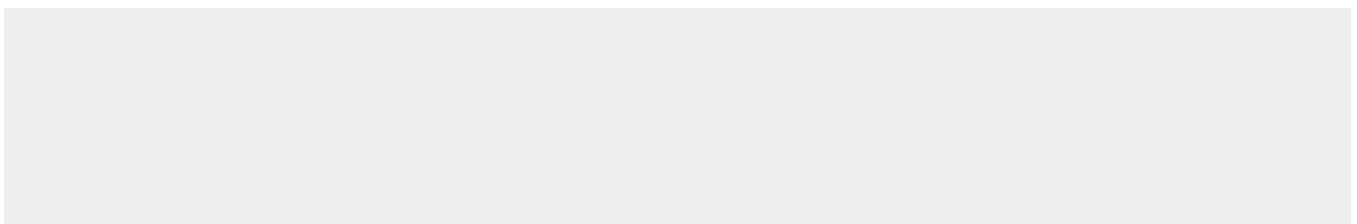
Cellular Location

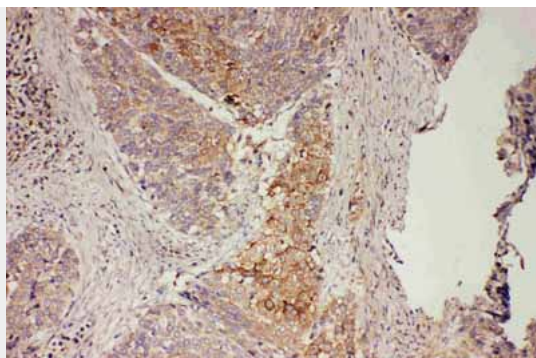
Cytoplasm. Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic granule {ECO:0000250|UniProtKB:Q03160}. Cell projection. Note=Predominantly cytoplasmic. Detected in stress granules, where mRNA is stored under stress conditions {ECO:0000250|UniProtKB:Q03160}

Anti-GRB7 Antibody - Protocols

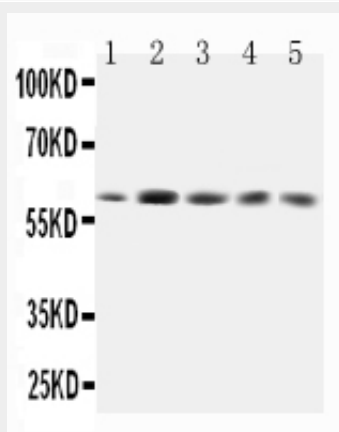
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GRB7 Antibody - Images



Anti-GRB7 antibody, ABO10903, IHC(P)IHC(P): Human Oesophagus Squama Cancer Tissue



Anti-GRB7 antibody, ABO10903, All Western blottingAll lanes: Anti-GRB7(ABO10903) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 40ugLane 2: SMMC Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: A549 Whole Cell Lysate at 40ugLane 5: SW620 Whole Cell Lysate at 40ugPredicted bind size: 60KDObserved bind size: 60KD

Anti-GRB7 Antibody - Background

GRB7, growth factor receptor-bound protein 7, is a protein which in humans is encoded by the GRB7 gene. The product of this gene belongs to a small family of adaptor proteins that are known to interact with a number of receptor tyrosine kinases and signaling molecules. This gene encodes a growth factor receptor-binding protein that interacts with epidermal growth factor receptor (EGFR) and ephrin receptors. The protein plays a role in the integrin signaling pathway and cell migration by binding with focal adhesion kinase (FAK). Alternative splicing results in multiple transcript variants encoding different isoforms, although the full-length nature of only two of the variants have been determined to date. GRB7 is an SH2-domain adaptor protein that binds to receptor tyrosine kinases and provides the intra-cellular direct link to the Ras proto-oncogene. Human GRB7 is located on the long arm of chromosome 17, next to the ERBB2 (alias HER2/neu) proto-oncogene. These two genes are commonly co-amplified (present in excess copies) in breast cancers. GRB7 thought to be involved in migration, is well known to be over-expressed in testicular germ cell tumors, esophageal cancers, and gastric cancers.