

Goat Anti-GRB7 (N Terminus) Antibody

Peptide-affinity purified goat antibody Catalog # AF1508a

Specification

Goat Anti-GRB7 (N Terminus) Antibody - Product Information

Application WB
Primary Accession Q14451

Other Accession NP 005301, 2886, 14786 (mouse)

Reactivity
Host
Clonality
Polyclonal
Concentration
Concent

Isotype IgG
Calculated MW 59681

Goat Anti-GRB7 (N Terminus) 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

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-GRB7 (N Terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GRB7 (N Terminus) 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

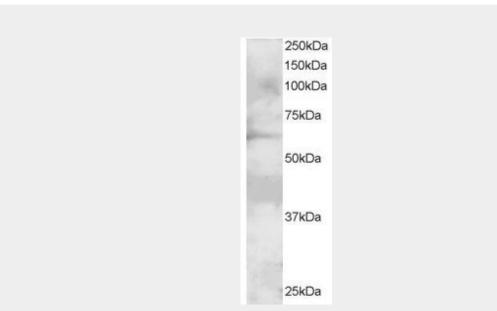
Cytoplasm. Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic granule {ECO:0000250|UniProtKB:Q03160}. Cell projection. Note=Predominantly cytoplasmic. Detected in stress granules, where mRNA is stored under stress conditions {ECO:0000250|UniProtKB:Q03160}

Goat Anti-GRB7 (N Terminus) Antibody - Protocols

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

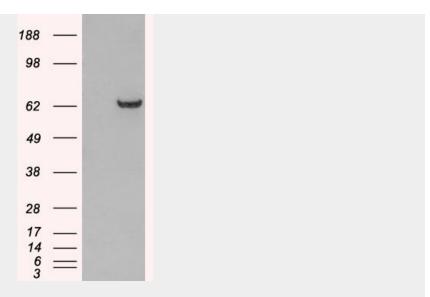
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Goat Anti-GRB7 (N Terminus) Antibody - Images



AF1508a staining (2 μg/ml) of A431 lysate (RIPA buffer, 30 μg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.





HEK293 overexpressing GRB7 (RC215362) and probed with AF1508a (mock transfection in first lane), tested by Origene.

Goat Anti-GRB7 (N Terminus) Antibody - Background

The product of this gene belongs to a small family of adapter 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 natures of only two of the variants have been determined to date.

Goat Anti-GRB7 (N Terminus) Antibody - References

Differential functions of growth factor receptor-bound protein 7 (GRB7) and its variant GRB7v in ovarian carcinogenesis. Wang Y, et al. Clin Cancer Res, 2010 May 1. PMID 20388850. Growth factor receptor-bound protein-7 (Grb7) as a prognostic marker and therapeutic target in breast cancer. Nadler Y, et al. Ann Oncol, 2010 Mar. PMID 19717535.

Structural and functional studies of the Ras-associating and pleckstrin-homology domains of Grb10 and Grb14. Depetris RS, et al. Nat Struct Mol Biol, 2009 Aug. PMID 19648926.

Tyrosine phosphorylation of growth factor receptor-bound protein-7 by focal adhesion kinase in the regulation of cell migration, proliferation, and tumorigenesis. Chu PY, et al. J Biol Chem, 2009 Jul 24. PMID 19473962.

Common genetic variation in candidate genes and susceptibility to subtypes of breast cancer. Mavaddat N, et al. Cancer Epidemiol Biomarkers Prev, 2009 Jan. PMID 19124506.