

GPIP137 Antibody (N-term) Blocking Peptide

Synthetic peptide

Catalog # BP2463a

Specification

GPIP137 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

[Q14444](#)**GPIP137 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 4076

Other Names

Caprin-1, Cell cycle-associated protein 1, Cytoplasmic activation- and proliferation-associated protein 1, GPI-anchored membrane protein 1, GPI-anchored protein p137, GPI-p137, p137GPI, Membrane component chromosome 11 surface marker 1, RNA granule protein 105, CAPRIN1, GPIAP1, GPIP137, M11S1, RNG105

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2463a](/product/products/AP2463a) was selected from the N-term region of human GPIP137. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GPIP137 Antibody (N-term) Blocking Peptide - Protein Information

Name CAPRIN1 {ECO:0000303|PubMed:31439799, ECO:0000312|HGNC:HGNC:6743}

Function

mRNA-binding protein that acts as a regulator of mRNAs transport, translation and/or stability, and which is involved in synaptic plasticity in neurons and cell proliferation and migration in multiple cell types (PubMed: [17210633](http://www.uniprot.org/citations/17210633), PubMed: [31439799](http://www.uniprot.org/citations/31439799)). Acts as an mRNA regulator by mediating formation of some phase-separated membraneless compartment: undergoes liquid-liquid phase separation upon binding to target mRNAs, leading to assemble mRNAs into cytoplasmic ribonucleoprotein granules that concentrate mRNAs with associated regulatory factors (PubMed: [31439799](http://www.uniprot.org/citations/31439799), PubMed: [31439799](http://www.uniprot.org/citations/31439799)).

[32302570](http://www.uniprot.org/citations/32302570), PubMed: [32302571](http://www.uniprot.org/citations/32302571), PubMed: [32302572](http://www.uniprot.org/citations/32302572), PubMed: [34074792](http://www.uniprot.org/citations/34074792), PubMed: [36040869](http://www.uniprot.org/citations/36040869), PubMed: [36279435](http://www.uniprot.org/citations/36279435)). Undergoes liquid-liquid phase separation following phosphorylation and interaction with FMR1, promoting formation of cytoplasmic ribonucleoprotein granules that concentrate mRNAs with factors that inhibit translation and mediate deadenylation of target mRNAs (PubMed: [31439799](http://www.uniprot.org/citations/31439799)). In these cytoplasmic ribonucleoprotein granules, CAPRIN1 mediates recruitment of CNOT7 deadenylase, leading to mRNA deadenylation and degradation (PubMed: [31439799](http://www.uniprot.org/citations/31439799)). Binds directly and selectively to MYC and CCND2 mRNAs (PubMed: [17210633](http://www.uniprot.org/citations/17210633)). In neuronal cells, directly binds to several mRNAs associated with RNA granules, including BDNF, CAMK2A, CREB1, MAP2, NTRK2 mRNAs, as well as to GRIN1 and KPNB1 mRNAs, but not to rRNAs (PubMed: [17210633](http://www.uniprot.org/citations/17210633)).

Cellular Location

Cytoplasm, Cytoplasmic ribonucleoprotein granule. Cytoplasm, cytosol. Cell projection, dendrite {ECO:0000250|UniProtKB:Q5M9G3}. Cell projection, lamellipodium. Note=Mediates formation and localizes to cytoplasmic ribonucleoprotein membraneless compartments (PubMed:31439799). Associated with RNA granules. At the leading edge of migrating fibroblasts, colocalizes with DDX3X (PubMed:28733330)

Tissue Location

Ubiquitous..

GPIP137 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

GPIP137 Antibody (N-term) Blocking Peptide - Images

GPIP137 Antibody (N-term) Blocking Peptide - Background

GPIP137, attached to cell membranes via a GPI-anchor, may play a role in transporting nutrient from the gut lumen across the gutlining epithelial cell layer. Expression of this protein is ubiquitous.

GPIP137 Antibody (N-term) Blocking Peptide - References

J. Immunol. 175 (7), 4274-4282 (2005)J. Biol. Chem. 279 (50), 52210-52217 (2004)J. Immunol. 172 (4), 2389-2400 (2004)Genomics 32 (1), 169-170 (1996)J. Biol. Chem. 270 (35), 20717-20723 (1995)