

# GPIP137 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2463b

### Specification

# **GPIP137** Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	<u>Q14444</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	78366
Antigen Region	615-649

# **GPIP137** Antibody (C-term) - 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

This GPIP137 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 615-649 amino acids from the C-terminal region of human GPIP137.

Dilution WB~~1:1000 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

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

#### **Precautions**

GPIP137 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **GPIP137** Antibody (C-term) - 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 neurogenesis, synaptic plasticity in neurons and cell proliferation and migration in multiple cell types (PubMed: 17210633, PubMed: 31439799, PubMed: 35979925). Plays an essential role in cytoplasmic stress granule formation (PubMed: 35977029). 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, PubMed:32302570, PubMed:32302571, PubMed:32302572, PubMed:<u>34074792</u>, PubMed:<u>36040869</u>, PubMed:<u>36279435</u>). 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:<u>31439799</u>). In these cytoplasmic ribonucleoprotein granules, CAPRIN1 mediates recruitment of CNOT7 deadenylase, leading to mRNA deadenylation and degradation (PubMed: 31439799). Binds directly and selectively to MYC and CCND2 mRNAs (PubMed: 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).

#### **Cellular Location**

Cytoplasm, Cytoplasmic ribonucleoprotein granule. Cytoplasm, cytosol. Cell projection, dendrite. 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 (C-term) - Protocols**

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

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

GPIP137 Antibody (C-term) - Images





The anti-GPIP137 Pab (Cat. #AP2463b) is used in Western blot to detect GPIP137 in HL-60 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# GPIP137 Antibody (C-term) - Background

GPIP137 may regulate the transport and translation of mRNAs of proteins involved in synaptic plasticity in neurons and cell proliferation and migration in multiple cell types. It is expressed in the cytoplasm.

# **GPIP137** Antibody (C-term) - References

Gessler, M., et al., Genomics 32(1):169-170 (1996). Ellis, J.A., et al., J. Biol. Chem. 270(35):20717-20723 (1995).