

Goat Anti-CAPRIN1 Antibody (internal region)
Purified Goat Polyclonal Antibody
Catalog # AF4212a

Specification

Goat Anti-CAPRIN1 Antibody (internal region) - Product Information

| | |
|-------------------|---|
| Application | WB |
| Primary Accession | Q14444 |
| Other Accession | 362173(rat) , NP_005889.3 , NP_976240.1 |
| Reactivity | Human |
| Predicted | Human, Rat, Pig, Dog |
| Host | Goat |
| Clonality | Polyclonal |
| Concentration | 0.5 |
| Calculated MW | 78366 |

Goat Anti-CAPRIN1 Antibody (internal region) - Additional Information

Gene ID 4076

Other Names

CAPRIN1; cell cycle associated protein 1; GPIAP1; GPIP137; M11S1; RNG105; p137GPI; GPI-anchored membrane protein 1; GPI-anchored protein p137; GPI-p137; RNA granule protein 105; activation/proliferation-associated protein 1; caprin 1; caprin-1; cell cycle

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

Peptide with sequence C-EQRPQKEPIDQ, from the internal region of the protein sequence according to NP_005889.3; NP_976240.1.

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-CAPRIN1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CAPRIN1 Antibody (internal region) - 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:34074792, PubMed:36040869, PubMed: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). 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..

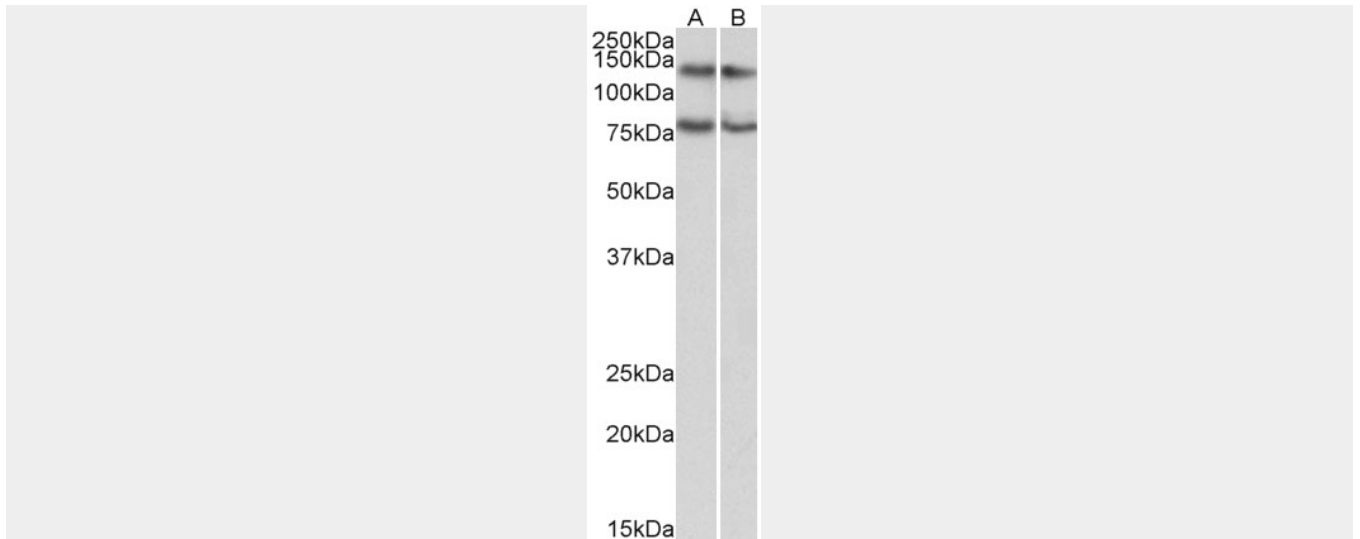
Goat Anti-CAPRIN1 Antibody (internal region) - Protocols

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](#)

Goat Anti-CAPRIN1 Antibody (internal region) - Images





AF4212a (0.3 $\mu\text{g/ml}$) staining of Jurkat (A) and HeLa (B) lysates (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CAPRIN1 Antibody (internal region) - References

Absence of caprin-1 results in defects in cellular proliferation. Wang B, David MD, Schrader JW. *Journal of immunology* (Baltimore, Md. : 1950) 2005 Oct 175 (7): 4274-82.