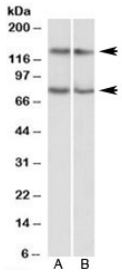
CAPRIN1 Goat Polyclonal Antibody / GPIP137 Antibody (R33945)

Catalog No.	Formulation	Size
R33945-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Rat, Dog, Pig
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	4076
Applications	Western blot: 0.3-1ug/ml ELISA (peptide) LOD: 1:16000
Limitations	This CAPRIN1 antibody is available for research use only.



CAPRIN1 Goat Polyclonal Antibody Western Blot Analysis of Caco-2, HeLa, Jurkat and K562 Cell Lysates. Western blot analysis of human Caco-2, HeLa, Jurkat and K562 cell lysates using GPIP137 Antibody. Immunoreactive bands are detected at approximately 80 and 140 kDa, compared with the calculated CAPRIN1 molecular weight of approximately 78 kDa. The higher-molecular-weight band is consistent with the historically described GPIP137 protein, named for its apparent molecular weight of approximately 137 kDa.

Description

CAPRIN1 Goat Polyclonal Antibody / GPIP137 Antibody targets cytoplasmic activation/proliferation-associated protein 1 (CAPRIN1), an RNA-binding protein involved in messenger RNA regulation, cellular proliferation, and the organization of cytoplasmic ribonucleoprotein complexes. Historically identified as GPI-anchored protein interacting protein p137 (GPIP137), CAPRIN1 was initially characterized through its association with membrane-related proteins before its broader functions in RNA metabolism became established. The protein participates in post-transcriptional regulatory

mechanisms that influence messenger RNA localization, translational activity, and cellular responses to environmental stress. Its interactions with RNA molecules and regulatory proteins contribute to the coordination of gene expression with changing cellular requirements.

CAPRIN1 associates with G3BP1 and other components of cytoplasmic stress granules, which are dynamic ribonucleoprotein condensates formed in response to conditions that disrupt translation initiation. These structures contain untranslated messenger RNAs, RNA-binding proteins, and translation-associated factors. Through interactions with G3BP1 and RNA-containing complexes, CAPRIN1 contributes to stress granule assembly and the redistribution of transcripts during cellular stress. Its participation in these assemblies reflects the importance of coordinated RNA-protein interactions in regulating protein synthesis and maintaining cellular homeostasis.

The protein is also known as RNG105, a designation associated with its role in neuronal RNA granules. CAPRIN1 participates in the transport and translational regulation of messenger RNAs within neuronal processes, where localized protein synthesis supports synaptic development and plasticity. Its interactions with translational regulators help coordinate the availability of selected transcripts at specific intracellular locations. These activities connect CAPRIN1 to mechanisms governing neuronal differentiation, RNA trafficking, and activity-dependent changes in protein expression.

Beyond neuronal RNA regulation, CAPRIN1 has been investigated for its contributions to cellular growth and cancer-associated processes. Altered expression has been linked to changes in proliferation, migration, and the regulation of transcripts involved in tumor development. The historical GPIP137 designation remains relevant to studies examining the protein's original characterization and molecular interactions, while its established RNA-binding functions provide a broader framework for understanding its biological significance. Research using CAPRIN1 Goat Polyclonal Antibody can help characterize this protein in relation to RNA granule organization, translational regulation, and cellular growth.

For an additional reagent targeting this RNA-binding protein, explore our CAPRIN1 Antibody, which provides complementary validation for studying stress granule formation, RNA regulation, and cellular proliferation.

Application Notes

Optimal dilution of the CAPRIN1 antibody should be determined by the researcher.

Immunogen

Amino acids EQRPQKEPIDQ were used as the immunogen for this CAPRIN1 antibody.

Storage

Aliquot and store the CAPRIN1 antibody at -20oC.

Alternate Names

Cytoplasmic activation proliferation associated protein 1 antibody, Cytoplasmic activation/proliferation-associated protein 1 antibody, GPI-anchored protein interacting protein p137 antibody, GPIP137 protein antibody, RNG105 antibody, CAPRIN-1 antibody, M11S1 antibody, CAPRIN1 RNA-binding protein antibody, CAPRIN1 stress granule protein antibody, CAPRIN1 cytoplasmic protein antibody

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