

# CAPRIN2 Rabbit pAb

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Catalog # AP54851

## Product Information

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|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>             | WB, IHC-P, IHC-F, IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Primary Accession</b>       | <a href="#">Q6IMN6</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Reactivity</b>              | Rat, Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Predicted</b>               | Pig, Mouse, Chicken, Horse, Sheep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Calculated MW</b>           | 125925                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from human CAPRIN2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Epitope Specificity</b>     | 101-200/1127                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SUBCELLULAR LOCATION</b>    | Cytoplasm; Mitochondrion. Colocalizes with aggregated mitochondria and Mitochondrion. Cytoplasm. Expressed throughout the cytoplasm.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Background Descriptions</b> | Caprin2 is 1127 amino acid highly conserved protein that is ubiquitously expressed with highest levels of expression in brain and spleen. Caprin2 stabilizes cytosolic $\beta$ -catenin and enhances LEF-1 dependent reporter gene activity as well as the expression of Wnt target genes in mammalian cells. Caprin2 promotes LRP5/6 phosphorylation by GSK-3 and enhances the interaction between Axin and LRP5/6. It is suggested that Caprin2 functions as a proapoptotic inhibitor of the cell cycle. Nine isoforms of Caprin2 exist due to alternative splicing events. |

## Additional Information

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| <b>Gene ID</b>     | 65981                                                                                                                                                                                                                                         |
| <b>Other Names</b> | Caprin-2, C1q domain-containing protein 1, Cytoplasmic activation/proliferation-associated protein 2, Gastric cancer multidrug resistance-associated protein, Protein EEG-1, RNA granule protein 140, CAPRIN2 {ECO:0000312   EMBL:AAI17673.1} |
| <b>Dilution</b>    | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500                                                                                                                                                                                    |
| <b>Storage</b>     | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.                                               |

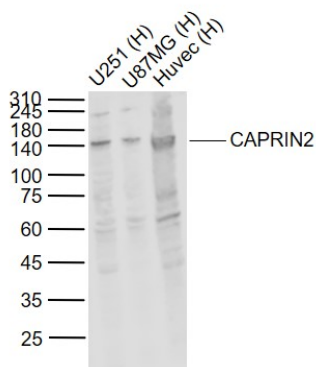
## Protein Information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | CAPRIN2 {ECO:0000312   EMBL:AAI17673.1}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Function          | Promotes phosphorylation of the Wnt coreceptor LRP6, leading to increased activity of the canonical Wnt signaling pathway (PubMed: <a href="#">18762581</a> ). Facilitates constitutive LRP6 phosphorylation by CDK14/CCNY during G2/M stage of the cell cycle, which may potentiate cells for Wnt signaling (PubMed: <a href="#">27821587</a> ). May regulate the transport and translation of mRNAs, modulating for instance the expression of proteins involved in synaptic plasticity in neurons (By similarity). Involved in regulation of growth as erythroblasts shift from a highly proliferative state towards their terminal phase of differentiation (PubMed: <a href="#">14593112</a> ). May be involved in apoptosis (PubMed: <a href="#">14593112</a> ). |
| Cellular Location | [Isoform 1]: Cytoplasm. [Isoform 5]: Mitochondrion. Note=Colocalizes with aggregated mitochondria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Tissue Location   | Detected in all tissues tested with highest levels of expression in brain and spleen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Background

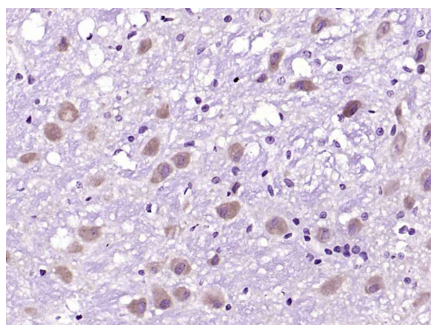
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## Images



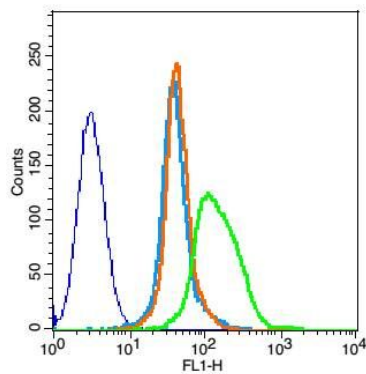
### Sample:

Lane 1: U251 (Human) Cell Lysate at 30 ug  
Lane 2: U87MG (Human) Cell Lysate at 30 ug  
Lane 3: Huvec (Human) Cell Lysate at 30 ug  
Primary: Anti-CAPRIN2 (AP54851) at 1/1000 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 120-140 kD  
Observed band size: 140 kD



Paraformaldehyde-fixed, paraffin embedded (rat cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CAPRIN2) Polyclonal Antibody, Unconjugated (AP54851) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Blank control: Mouse spleen cells (fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).  
Primary Antibody: Rabbit Anti-CAPRIN2



antibody(AP54851), Dilution: 5  $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;  
Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions );  
Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.