CAPS1 Antibody

CATALOG NUMBER: 4559

Western blot analysis of CAPS1 in rat brain tissue lysate with CAPS1 antibody at (A) 0.5 and (B) 1 ug/mL.

Immunofluorescence of CAPS1 in human brain tissue with CAPS1 antibody at 20 ug/mL.

Immunohistochemistry of CAPS1 in human brain with CAPS1 antibody at 5 ug/mL.

Specifications

SPECIES REACTIVITY: Human, Mouse, Rat

TESTED APPLICATIONS: ELISA, IF, IHC-P, WB

APPLICATIONS: CAPS1 antibody can be used for detection of CAPS1 by Western blot at 0.5 - 1 ug/mL. Antibody can also be used for immunohistochemistry starting at 5 ug/mL. For immunofluorescence start at 20 ug/mL.

Antibody validated: Western Blot in rat samples; Immunohistochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested.

USER NOTE: Optimal dilutions for each application to be determined by the researcher.

POSITIVE CONTROL:
1) Cat. No. 1463 - Rat Brain Tissue Lysate
2) Cat. No. 10-301 - Human Brain Tissue Slide

SPECIFICITY: Numerous isoforms of CAPS1 are known to exist; the lower molecular weight bands seen in the immunoblot image are likely to be these isoforms. This CAPS1 antibody is predicted to be specific to CAPS1 and not recognize CAPS2.

IMMUNOGEN: CAPS1 antibody was raised against a 20 amino acid synthetic peptide near the carboxy terminus of the human CAPS1.

The immunogen is located within the last 50 amino acids of CAPS1.

HOST SPECIES: Rabbit

Properties

PURIFICATION: CAPS1 Antibody is affinity chromatography purified via peptide column.

PHYSICAL STATE: Liquid

BUFFER: CAPS1 Antibody is supplied in PBS containing 0.02% sodium azide.

CONCENTRATION: 1 mg/mL

STORAGE CONDITIONS: CAPS1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY: Polyclonal
ISOTYPE: IgG
CONJUGATE: Unconjugated

Additional Info
ALTERATE NAMES: CAPS1 Antibody: CAPS, CAPS1, CADPS1, CAPS, KIAA1121, Calcium-dependent secretion activator 1, Calcium-dependent activator protein for secretion 1, CAPS-1
ACCESSION NO.: NP_899631
PROTEIN GI NO.: 34452713
OFFICIAL SYMBOL: CADPS
GENE ID: 8618

Background
BACKGROUND: CAPS1 Antibody: CAPS1 and its related protein CAPS2 encode novel neural/endocrine-specific cytosolic and peripheral membrane proteins. Both are essential components of the synaptic vesicle priming machinery and are required for the Ca2+-regulated exocytosis of secretory vesicles; CAPS-deficient neurons contain no or very few fusion competent synaptic vesicles, causing a selective impairment of fast phasic transmitter release. CAPS1 acts at a stage in exocytosis that follows ATP-dependent priming, which involves the essential synthesis of phosphatidylinositol 4, 5-bisphosphate and is thought to be a specific regulator of large dense-core vesicle fusion.


FOR RESEARCH USE ONLY

January 5, 2019