

Rabbit Anti-CAPS1 antibody

SL10422R

Product Name CAPS1

Chinese Name 钙依赖分泌激活蛋白 1 抗体

Alias Cadps; CADPS1; Calcium dependent secretion activator 1; Calcium-dependent activator protein for secretion 1; Calcium-dependent secretion activator 1; Caps; CAPS-1; rCAPS; CAPS1_HUMAN.

Immunogen Species Rabbit

Clonality Polyclonal

React Species (predicted: Human, Mouse, Rat, Pig, Cow, Rabbit, Sheep,)

Applications IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 153kDa

Cellular localization cytoplasmic The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human CAPS1: 1231-1330/1353

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Product Detail This gene encodes a novel neural/endocrine-specific cytosolic and peripheral membrane protein required for the Ca²⁺-regulated exocytosis of secretory vesicles. The protein acts at a

stage in exocytosis that follows ATP-dependent priming, which involves the essential synthesis of phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P₂). Alternative splicing has been observed at this locus and three variants, encoding distinct isoforms, are described. [provided by RefSeq, Aug 2008]

Function:

CAPS/Cadps family which consists of two members, CAPS1 and CAPS2. The CAPS family proteins are involved in the secretion of different secretory substances in developing and postnatal brains. In addition CAPS1 regulates catecholamine release from neuroendocrine cells and is expressed predominantly in the brain.

Subunit:

Homodimer. Interacts with RASL10B. Interacts with the dopamine receptor DRD2.

Subcellular Location:

Cytoplasmic vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, synapse. Note=Membrane-associated to vesicles. Strongly enriched in synaptic fractions. Preferentially binds to DCVs but not to SVs. Binds phosphoinositides, with a strong selectivity for PtdIns(4,5)P₂ over PtdIns(3,4,5)P₃. Probably localizes to different vesicles compared to CADPS2.

Tissue Specificity:

Specifically expressed in neural and endocrine secretory tissues. Expressed in brain and pancreas and at low level in heart. Also expressed in fetal heart, cerebellum, cerebral cortex, medulla, occipital pole, frontal and temporal lobes, and putamen, as well as weak expression in spinal cord.

Similarity:

Contains 1 C2 domain.

Contains 1 MHD1 (MUNC13 homology domain 1) domain.

Contains 1 PH domain.

SWISS:

Q9ULU8

Gene ID:

8618

Database links:

[Entrez Gene: 8618](#) Human

[Entrez Gene: 27062](#) Mouse



[Entrez Gene: 26989](#) Rat

[Omin: 604667](#) Human

[SwissProt: Q9ULU8](#) Human

[SwissProt: Q80TJ1](#) Mouse

[SwissProt: Q62717](#) Rat

[Unigene: 260881](#) Mouse

[Unigene: 88197](#) Rat