

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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	153kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CAPS1:1231-1330/1353
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
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 phosphoinosides, 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: 8618Human

Entrez Gene: 27062Mouse

Entrez Gene: 26989Rat

Omim: 604667Human

SwissProt: Q9ULU8Human

SwissProt: Q80TJ1Mouse

SwissProt: Q62717Rat

Unigene: 260881 Mouse

Unigene: 88197Rat

Important Note:

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

