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CADPS Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13516

Specification

CADPS Antibody (N-Terminus) - Product Information

Application	**WB, IF, IHC**
Primary Accession	Q9ULU8
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**153kDa KDa**

CADPS Antibody (N-Terminus) - Additional Information

Gene ID 8618

Other Names
Calcium-dependent secretion activator 1, Calcium-dependent activator protein for secretion 1, CAPS-1, CADPS, CAPS, CAPS1, KIAA1121

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
CADPS Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CADPS Antibody (N-Terminus) - Protein Information

Name CADPS

Synonyms CAPS, CAPS1, KIAA1121

Function
Calcium-binding protein involved in exocytosis of vesicles filled with neurotransmitters and neuropeptides. Probably acts upstream of fusion in the biogenesis or maintenance of mature secretory vesicles. Regulates catecholamine loading of DCVs. May specifically mediate the Ca(2+)-dependent exocytosis of large dense-core vesicles (DCVs) and other dense-core vesicles by acting as a PtdIns(4,5)P2- binding protein that acts at prefusion step following ATP-dependent priming and participates in DCVs-membrane fusion. However, it may also participate in small clear synaptic vesicles (SVs) exocytosis and it is unclear whether its function is related to Ca(2+) triggering (By similarity).

Cellular Location
Synapse {ECO:0000250|UniProtKB:Q62717}. Cytoplasmic vesicle, secretory vesicle, neuronal dense core vesicle membrane {ECO:0000250|UniProtKB:Q62717}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q62717}. Note=Membrane-associated to vesicles Strongly enriched in

synaptic fractions. Preferentially binds to dense core vesicles but not to synaptic vesicles. 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 {ECO:0000250|UniProtKB:Q62717}

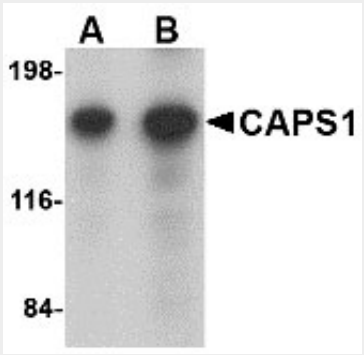
Tissue Location
Specifically expressed in neural and endocrine secretory tissues. Expressed in brain and pancreas and at low level in heart. Also expressed in fetal heart, cerebellum, cerebral cortex, medulla, occipital pole, frontal and temporal lobes, and putamen, as well as weak expression in spinal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

CADPS Antibody (N-Terminus) - Protocols

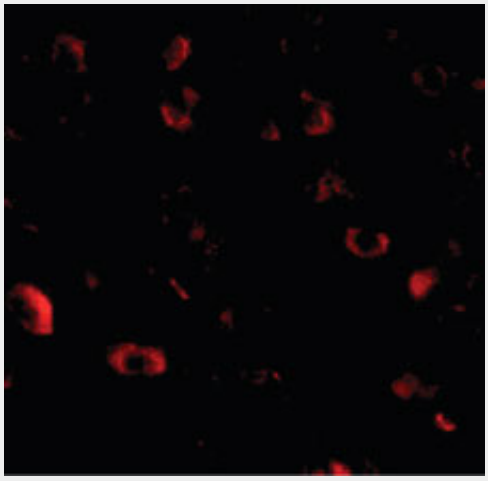
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CADPS Antibody (N-Terminus) - Images



Western blot of CAPS1 in rat brain tissue lysate with CAPS1 antibody at (A) 0.25 and (B) 0.5 ug/ml.



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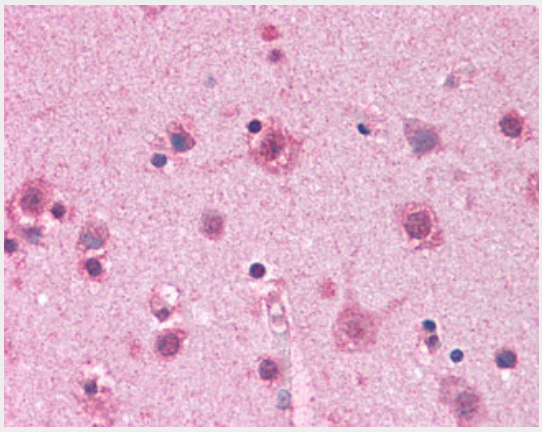
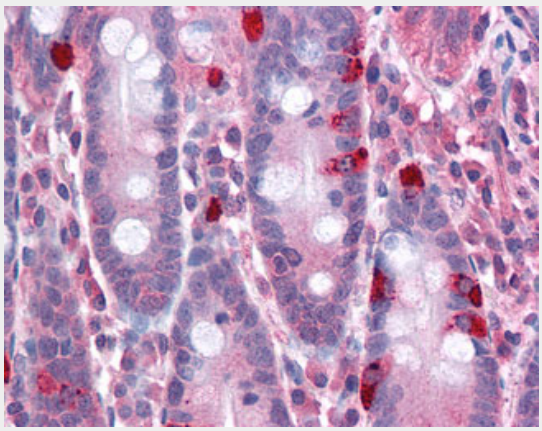
Immunofluorescence of CAPS1 in human brain tissue with CAPS1 antibody at 20 ug/ml.



Anti-CADPS antibody IHC of human brain, cortex.



Anti-CADPS antibody IHC of human small intestine.

CADPS Antibody (N-Terminus) - Background

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CADPS Antibody (N-Terminus) - References

Cisternas F.A.,et al.Genomics 81:279-291(2003).
Hirosawa M.,et al.DNA Res. 6:329-336(1999).
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Bechtel S.,et al.BMC Genomics 8:399-399(2007).