

CLSTN1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18952a

Specification

CLSTN1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O94985
Other Accession	O6Q0N0 , O9EPL2 , NP_001009566.1
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	109793
Antigen Region	15-42

CLSTN1 Antibody (N-term) - Additional Information

Gene ID 22883

Other Names

Calsyntenin-1, Alcadein-alpha, Alc-alpha, Alzheimer-related cadherin-like protein, Non-classical cadherin XB31alpha, Soluble Alc-alpha, SAlc-alpha, CTF1-alpha, C-terminal fragment 1-alpha, CLSTN1, CS1, KIAA0911

Target/Specificity

This CLSTN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15-42 amino acids from the N-terminal region of human CLSTN1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CLSTN1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLSTN1 Antibody (N-term) - Protein Information

Name CLSTN1 ([HGNC:17447](#))

Function Postsynaptic adhesion molecule that binds to presynaptic neuexins to mediate both excitatory and inhibitory synapse formation (By similarity). Promotes synapse development by acting as a cell adhesion molecule at the postsynaptic membrane, which associates with neuexin-alpha at the presynaptic membrane (By similarity). Also functions as a cargo in axonal anterograde transport by acting as a molecular adapter that promotes KLC1 association with vesicles (PubMed:[21385839](#)). Complex formation with APBA2 and APP, stabilizes APP metabolism and enhances APBA2-mediated suppression of beta-APP40 secretion, due to the retardation of intracellular APP maturation (PubMed:[12972431](#)).

Cellular Location

Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q9EPL2}; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Golgi apparatus membrane; Single-pass type I membrane protein. Cell projection, neuron projection.

Note=Localized in the postsynaptic membrane of both excitatory and inhibitory synapses {ECO:0000250|UniProtKB:Q9EPL2}

Tissue Location

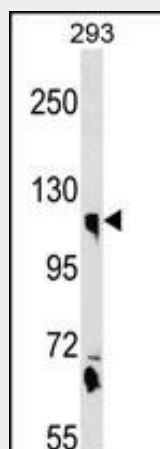
Expressed in the brain and, a lower level, in the heart, skeletal muscle, kidney and placenta. Accumulates in dystrophic neurites around the amyloid core of Alzheimer disease senile plaques (at protein level).

CLSTN1 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CLSTN1 Antibody (N-term) - Images



CLSTN1 Antibody (N-term) (Cat. #AP18952a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the CLSTN1 antibody detected the CLSTN1 protein (arrow).

CLSTN1 Antibody (N-term) - Background

Induces KLC1 association with vesicles and functions as a cargo in axonal anterograde transport. Complex formation with APBA2 and APP, stabilizes APP metabolism and enhances APBA2-mediated suppression of beta-APP40 secretion, due to the retardation of intracellular APP maturation. In complex with APBA2 and C99, a C-terminal APP fragment, abolishes C99 interaction with PSEN1 and thus APP C99 cleavage by gamma-secretase, most probably through stabilization of the direct interaction between APBA2 and APP. The intracellular fragment AICD suppresses APBB1-dependent transactivation stimulated by APP C-terminal intracellular fragment (AICD), most probably by competing with AICD for APBB1-binding. May modulate calcium-mediated postsynaptic signals (By similarity).

CLSTN1 Antibody (N-term) - References

Konecna, A., et al. Mol. Biol. Cell 17(8):3651-3663(2006)
Wang, A.G., et al. Biochem. Biophys. Res. Commun. 345(3):1022-1032(2006)
Araki, Y., et al. J. Biol. Chem. 279(23):24343-24354(2004)
Schmitt-Ulms, G., et al. Nat. Biotechnol. 22(6):724-731(2004)
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