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CLSTN1 Antibody

Rabbit mAb
Catalog # AP92193

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	O94985
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	Alcadein alpha 1; alcalpha1; alcalpha2; Calsyntenin 1; CDHR12; Clstn1; CS1; CSTN1; PIK3CD; XB31alpha;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	109793

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CLSTN1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

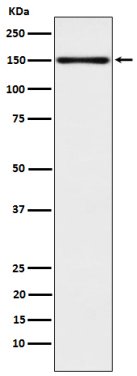
Name	CLSTN1 (HGNC:17447)
Function	Postsynaptic adhesion molecule that binds to presynaptic neurexins to mediate both excitatory and inhibitory synapse formation (By similarity). Promotes synapse development by acting as a cell adhesion molecule at the postsynaptic membrane, which associates with neurexin-alpha 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).

Images



Western blot analysis of CLSTN1 expression in 293T cell lysate.