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CLSTN2 Rabbit pAb

Catalog # AP97808

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9H4D0
Other Accession	Q9H4D0
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Chicken, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	107006
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CLSTN2
Epitope Specificity	261-360/955
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 2 cadherin domains.
Post-translational modifications	Proteolytically processed under normal cellular conditions. A primary zeta-cleavage generates a large extracellular (soluble) N-terminal domain (sAlc) and a short C-terminal transmembrane fragment (CTF1). A secondary cleavage catalyzed by gamma-secretase within the transmembrane domain releases the beta-Alc-gamma chain in the extracellular milieu and produces an intracellular fragment (AlcICD). This processing is strongly suppressed in the tripartite complex formed with APBA2 and APP, which seems to prevent the association with PSEN1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Members of the calsyntenin protein family are localized to the post-synaptic membrane of exicitatory central nervous system (CNS) synapses. Calsyntenin-2, also known as Alcadein-gamma, is a 955 amino acid protein that localizes to the endoplasmic reticulum, golgi apparatus and plasma membranes. Containing 2 cadherin-like repeats in its N-terminal extracellular region, calsyntenin-2 binds synaptic calcium with its cytoplasmic domain, suggesting a role in the modulation of calcium-mediated postsynaptic signals. Under normal physiological conditions, calsyntenin-2 is protoeolytically processed in an event in which the primary zeta-cleavage generates a short C-terminal transmembrane fragment and a long extracellular N-terminal domain.

Additional Information

Gene ID	64084
Other Names	ALC-GAMMA; CDHR13; CS2; CSTN2; alcagamma; CSTN2_HUMAN; CLSTN2; Alcadein-gamma (Alc-gamma); calsyntenin 2; cadherin-related family member

	13
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	CLSTN2 (HGNC:17448)
Synonyms	CS2
Function	Postsynaptic adhesion molecule that binds to presynaptic neurexins to mediate synapse formation, and which is involved in learning and memory (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).
Cellular Location	Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q9ER65}; Single-pass type I membrane protein. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9ER65}; Single-pass type I membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9ER65}; Single-pass type I membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:Q9ER65}. Note=Most prominent in the postsynaptic specializations of asymmetric (type I) synapses with both axodendritic and axospinous localization {ECO:0000250|UniProtKB:Q9ER65}
Tissue Location	Restricted to the brain.

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