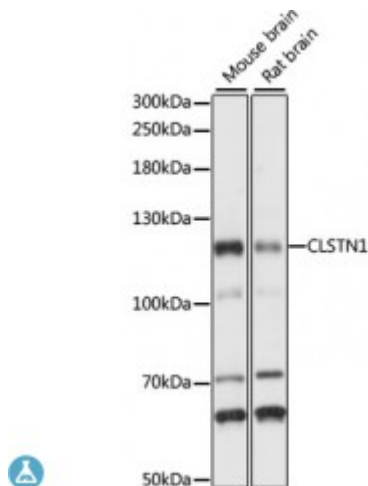


Anti-CLSTN1 Antibody



Description

This gene is a member of the calsynenin family, a subset of the cadherin superfamily. The encoded transmembrane protein, also known as alcadein-alpha, is thought to bind to kinesin-1 motors to mediate the axonal anterograde transport of certain types of vesicle. Amyloid precursor protein (APP) is trafficked via these vesicles and so this protein is being investigated to see how it might contribute to the mechanisms underlying Alzheimer's disease. Alternative splicing results in multiple transcript variants.

Model	STJ117600
Host	Rabbit
Reactivity	Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 29-350 of human CLSTN1 (NP_055759.3).
Gene ID	22883
Gene Symbol	CLSTN1
Dilution range	WB 1:200 - 1:2000
Tissue Specificity	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)
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	Calsyntenin-1 Alcadein-alpha Alc-alpha Alzheimer-related cadherin-like protein Non-classical cadherin XB31alpha
Molecular Weight	109.793 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:17447OMIM:611321
Alternative Names	Calsyntenin-1 Alcadein-alpha Alc-alpha Alzheimer-related cadherin-like protein Non-classical cadherin XB31alpha
Function	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 AlcICD 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 ,
Cellular Localization	Endoplasmic reticulum membrane,
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 presenilin gamma-secretase within the transmembrane domain releases the beta-Alc-alpha 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,