10320 Camino Santa Fe, Suite G
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KD-Validated Anti-Calsyntenin 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1350

Specification

KD-Validated Anti-Calsyntenin 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	O94985
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 110 kDa , observed, 150 kDa KDa**
Gene Name	**CLSTN1**
Aliases	**CLSTN1; Calsyntenin 1; KIAA0911; CDHR12; CSTN1; Alzheimer-Related Cadherin-Like Protein; Cadherin-Related Family Member 12; Non-Classical Cadherin XB31alpha; Alcadein-Alpha; Calsyntenin-1; ALC-ALPHA; XB31alpha; Alcalpha1; Alcalpha2; Alc-Alpha; PIK3CD; CST-1; CS1**
Immunogen	**A synthesized peptide derived from human CLSTN1**

KD-Validated Anti-Calsyntenin 1 Rabbit Monoclonal Antibody - 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 (HGNC:17447)

KD-Validated Anti-Calsyntenin 1 Rabbit Monoclonal Antibody - 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}

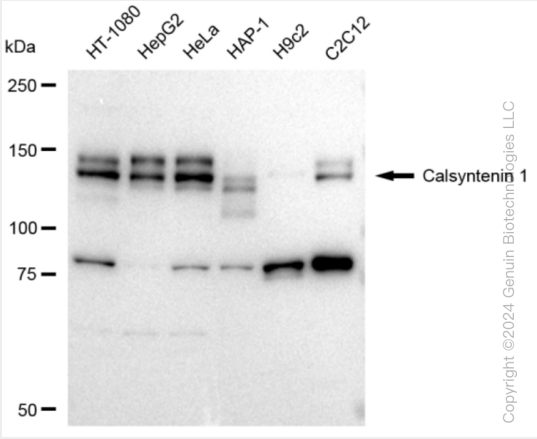
Tissue Location
Expressed in the brain and, a lower level, in the heart, skeletal muscle, kidney and placenta. Accumulates in dystrophic neurites around the amyloid core of Alzheimer disease senile plaques (at protein level).

KD-Validated Anti-Calsyntenin 1 Rabbit Monoclonal Antibody - 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

KD-Validated Anti-Calsyntenin 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Calsyntenin 1 antibody (Cat#AGI1350). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Calsyntenin 1 antibody (Cat#AGI1350, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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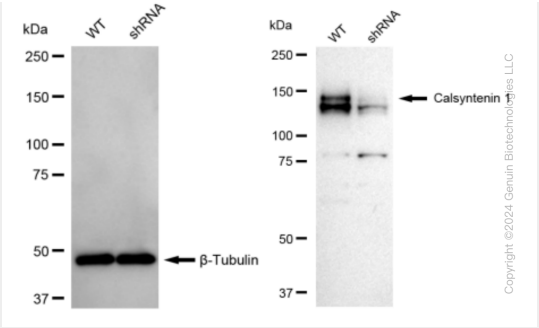
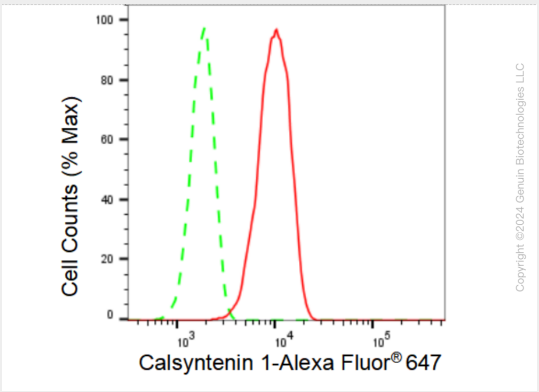


Western blotting analysis using anti-Calsyntenin 1 antibody (Cat#AGI1350). Calsyntenin 1 expression in wild type (WT) and Calsyntenin 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Calsyntenin 1 antibody (Cat#AGI1350, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Calsyntenin 1 expression in HT-1080 cells using Calsyntenin 1 antibody (Cat#AGI1350, 1:2,000). Green, isotype control; red, Calsyntenin 1.