

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Calsyntenin-3 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) Calsyntenin-1 and rhCalsyntenin-2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Calsyntenin-3 Lys21-Thr849 Accession # Q9BQT9
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

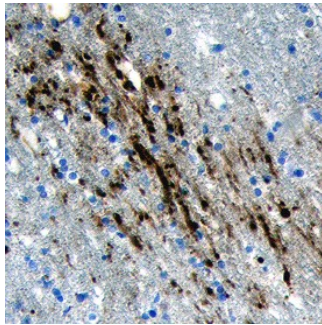
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Calsyntenin-3
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



Calsyntenin-3 in Human Brain.
Calsyntenin-3 was detected in immersion fixed paraffin-embedded sections of human brain (cortex) using Sheep Anti-Human Calsyntenin-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5244) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific labeling was localized to the neuronal processes and synaptic boutons. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Calsyntenin-3 (CST-3; also CDH-11 and Alcadein-β) is a 160 kDa member of the Alcadein family of molecules. It is expressed on the membranes of GABAergic neurons and in the granules of anterior pituitary secretory cells. It is a calcium-binding protein that is proposed to regulate post-synaptic signaling, plus participate in the formation of a membrane-associated APP-X11L-CST-3 complex that blocks APP cleavage. Mature human CST-3 is a 937 amino acid (aa) type I transmembrane protein. It contains two cadherin domains (aa 29-246) in the extracellular region, and an 87 aa cytoplasmic tail. Cleavage presumably occurs, generating a soluble 120 kDa ECD. One splice event shows a 34 aa substitution for the N-terminal 21 amino acids. Over aa 21-849, human CST-3 shares 97% aa identity with mouse CST-3.