

DESCRIPTION

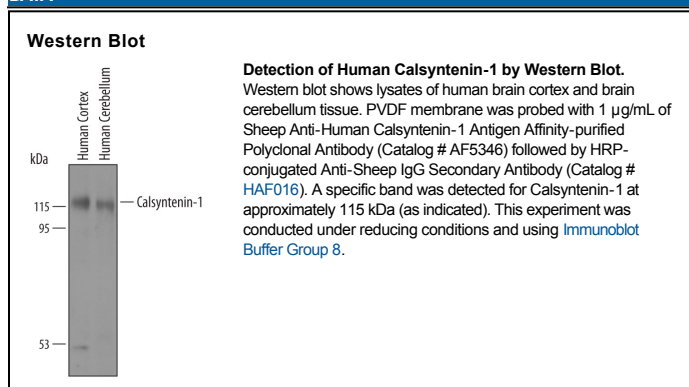
Species Reactivity	Human
Specificity	Detects human Calsyntenin-1 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) Calsyntenin-2 and rhCalsyntenin-3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Calsyntenin-1 isoform 2 Arg30-Thr851 Accession # AAH33902
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	1 µg/mL	See Below

DATA



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-1 (CST-1; also Alcadin-α) is a 140-150 kDa member of the Alcadin family of molecules. It is expressed in the ER/Golgi and on the plasma membranes of almost all neurons. It is a calcium-binding protein that may regulate post-synaptic signaling and APP cleavage and gene activation. Notably, when cleaved in a manner similar to APP, its intracellular fragment antagonizes APP AICD gene activation. Mature human CST-1 is a 953 amino acid (aa) type I transmembrane protein. It contains two cadherin domains (aa 38-265) in its extracellular region (aa 29-859) and a 101 aa cytoplasmic tail. Extracellular cleavage occurs at Met825 Ala826, generating a soluble 115 kDa ECD. Isoforms involve a 78 aa substitution for aa 917-981, plus deletions of aa 72-81 and 507-525. Over aa 30-851, human CST-1 shares 92% aa identity with mouse CST-1.