

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
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Calsyntenin-1 (CST-1; also Alcadein-α) is a 140-150 kDa member of the Alcadein 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.