

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cerebellin-4 in direct ELISAs. In direct ELISAs, approximately 10% cross-reactivity with recombinant human (rh) Cerebellin-1 is observed, and less than 5% cross-reactivity with rhCerebellin-2 and rhCerebellin-3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Cerebellin-4 Gln28-Leu201 Accession # Q9NTU7
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

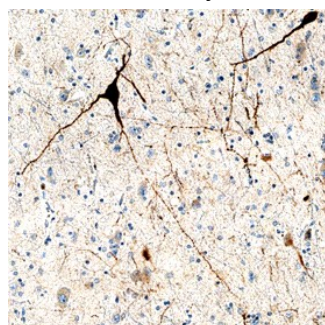
APPLICATIONS

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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



Cerebellin-4 in Human Hypothalamus.

Cerebellin-4 was detected in immersion fixed paraffin-embedded sections of human hypothalamus using Sheep Anti-Human Cerebellin-4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6740) at 10 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 staining was localized to neuronal cell bodies and processes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

CBLN4 (Cerebellin-4) is a 26-35 kDa, secreted glycoprotein member of the C1q/TNF Superfamily of molecules. It is expressed in developing Sertoli cells and select neurons in the dorsal raphe, entorhinal cortex and arcuate nucleus. In the testis, it likely promotes cell differentiation; in the brain, it is possible that it participates in synapse formation via an interaction with neuroligin. Mature human CBLN4 is 174 amino acids (aa) in length (aa 28-201). It contains two N-terminal cysteines that mediate homo-hexamer formation, and a C-terminal C1q domain (aa 66-201) that promotes homotrimer formation. CBLN4 also reportedly has the potential to multimerize with the other CBLN-related molecules, CBLN1-3. Mature human CBLN4 shares 99% aa identity with mouse CBLN4.