

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Collagen XXV α 1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) COL1A1, rhCOL3A1, rhCOL4A1, rhCOL13A1, rhCOL23A1 and recombinant mouse COL13A1 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 540802
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Collagen XXV α 1 Gly189-Lys654 Accession # NP_942014
Formulation	Lyophilized from a 0.2 μ m 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 μ m 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	8-25 μ g/mL	Immersion fixed paraffin-embedded sections of Alzheimer's human brain

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 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. 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

Collagen XXV (Collagen 25 alpha 1 chain; also CLAC-P) is a neuronal, 65-75 kDa member of the Collagenous transmembrane (TM) subfamily of the Collagen protein family. It is synthesized as a 654 amino acid (aa) type II TM glycoprotein that contains a 33 aa cytoplasmic region (aa 1-33) and a 600 aa extracellular domain (ECD) (aa 55-654). The ECD contains seven Collagen-like domains. Furin cleavage between Arg112-Glu113 generates a 70 kDa soluble fragment that homotrimerizes and binds to early A β amyloid deposits. There are at least five multiple splice forms that impact the ECD. Amino acids 139-146 and the seventh Collagen-like domain (aa 571-630) are most often affected. Over aa 189-654, human COL25A1 is 95% aa identical to mouse COL25A1.