

## DESCRIPTION

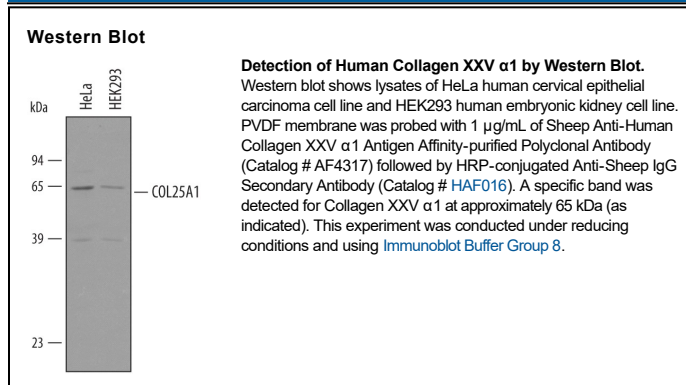
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human Collagen XXV $\alpha$ 1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 2% cross-reactivity with recombinant human COL23A1 is observed.                                 |
| <b>Source</b>             | Polyclonal Sheep IgG  |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Collagen XXV $\alpha$ 1<br>Gly189-Lys654<br>Accession # NP_942014   |
| <b>Formulation</b>        | Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 $\mu$ 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    |
|---------------------|---------------------------|-----------|
| <b>Western Blot</b> | 1 $\mu$ g/mL              | See Below |

## DATA



## PREPARATION AND STORAGE

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

## 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 $\beta$  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.