



## Anti-human Collagen XXV $\alpha 1$ Antibody

### ORDERING INFORMATION

**Catalog Number:** AF4317

**Lot Number:** ZOXC01

**Size:** 100  $\mu$ g

**Formulation:** 0.2  $\mu$ m filtered solution in PBS with 5% trehalose

**Storage:** -20° C

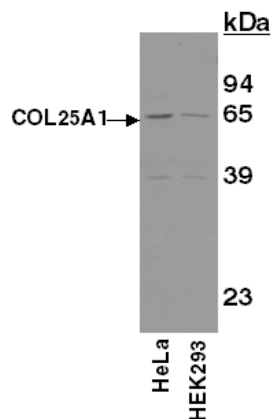
**Reconstitution:** sterile PBS

**Specificity:** human COL25A1

**Immunogen:** NS0-derived rhCOL25A1 isoform 1 (aa 189 - 654)

**Ig Type:** sheep IgG

**Applications:** Western blot  
Direct ELISA



**Detection of COL25A1 with AF4317.** Cell lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0  $\mu$ g/mL sheep anti-hCOL25A1.

### 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.

### Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human COL25A1 isoform 1 (rhCOL25A1; aa 189 - 654; Accession # NP\_942014). Human COL25A1 specific IgG was purified by human COL25A1 affinity chromatography.

### Formulation

Lyophilized from a 0.2  $\mu$ m filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody has been selected for its ability to recognize human COL25A1 in direct ELISAs and Western blots. In these formats, less than 2% cross-reactivity was shown with rhCOL23A1.

### Applications

**Western blot** - An antibody concentration of 1.0  $\mu$ g/mL is recommended.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0  $\mu$ g/mL with the appropriate secondary reagents to detect human COL25A1. The detection limit for rhCOL25A1 is approximately 0.5 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**

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