



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

### ORDERING INFORMATION

**Catalog Number:** AF4165

**Lot Number:** ZGK01

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

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

**Storage:** -20° C

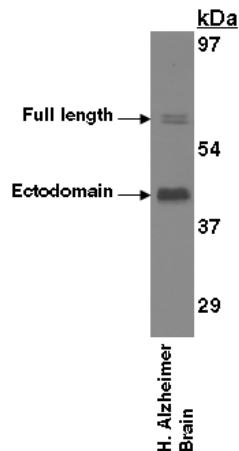
**Reconstitution:** sterile PBS

**Specificity:** human COL23A1

**Immunogen:** NS0-derived rhCOL23A1 isoform 1

**Ig Type:** sheep IgG

**Applications:** Western blot  
Direct ELISA



### Detection of COL23A with AF4165.

Tissue lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0  $\mu$ g/mL sheep anti-hCOL23A1.

### Background

Collagen XXIII  $\alpha$ 1 (COL23A1) is an epithelial cell type 2 transmembrane glycoprotein with multiple collagen-like domains in its extracellular region. Intracellular furin-mediated cleavage of the molecule generates a 58 kDa shed fragment that forms disulfide-linked trimers. An alternately spliced isoform consists of nearly 300 amino acids of the membrane proximal extracellular domain (ECD), flanked by substituted sequences. COL23A1 is upregulated in many transformed cell lines and serves as an indicator for tumor aggressiveness in prostate cancer. Within the ECD, human COL23A1 shares 89% aa sequence identity with mouse and rat COL23A1.

### Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human Collagen XXIII  $\alpha$ 1 isoform 1 (rhCOL23A1; R&D Systems, Catalog # 4165-CL). Human COL23A1 specific IgG was purified by human COL23A1 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 COL23A1 in direct ELISAs and Western blots. In these formats, this antibody shows less than 5% cross-reactivity with rhCOL25A1.

### 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 COL23A1. The detection limit for rhCOL23A1 is approximately 0.1 ng/well.

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