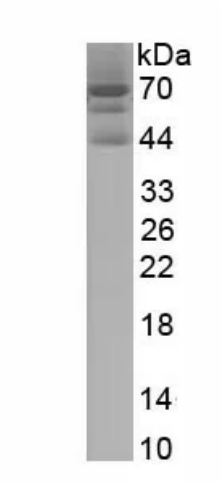
Active Collagen Type XII (COL12)

Catalog#:PHH12827

概述（Summary）

别称（Alternative Names）	COL12-A1; COL12A1L; COL12A1; Collagen Alpha-1(XII)chain
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Pro2802-Gly3063】
Accession #	Q99715
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	27.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Type XII collagen interacts with type I collagen-containing fibrils, the COL1 domain could be associated with the surface of the fibrils, and the COL2 and NC3 domains may be localized in the perifibrillar matrix.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

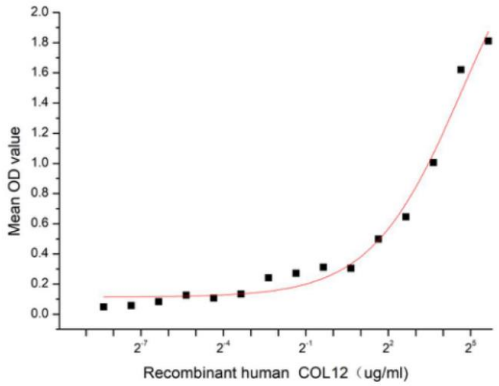


Figure 1. The binding activity of recombinant human COL12 and recombinant mouse MMP12

Collagen Type XII (COL12), an extracellular matrix (ECM) protein, is a member of the fibrillar collagen family. COL12 is a minor collagen component found in various tissues, including cartilage, tendons, ligaments, blood vessel walls and corneas, it plays an important role in maintaining the structure and function of these tissues. It has been reported that the binding of COL12 and MMP12 is an important link in the remodeling and inflammation of ECM. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human COL12 and recombinant mouse MMP12. Briefly, COL12 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to MMP12-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-COL12 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human COL12 and recombinant mouse MMP12 was shown in Figure 1, and this effect was in a dose dependent manner.

注意事项（Note）

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