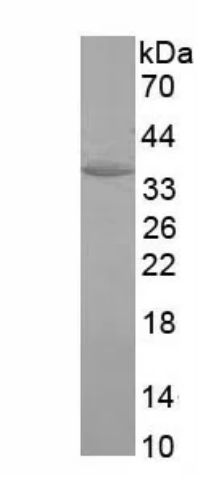
Active Collagen Type I Alpha 1 (COL1a1)

Catalog#:PHH12345

概述（Summary）

别称（Alternative Names）	COL-1A1; COL1-A1; COL1A-1; OI4; Collagen Alpha-1(I)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）	【Asp1219-Leu1464】
Accession #	P02452
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	29.1 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 I collagen is a member of group I collagen (fibrillar forming collagen).

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

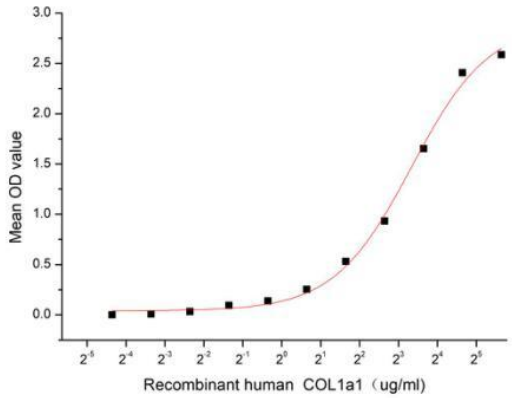


Figure 1. The binding activity of recombinant human COL1a1 and recombinant COL1a2

Type I collagen is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. It is a heterotrimer that consists of two alpha 1 chains and one alpha 2 chain, although homotrimers consisting of three identical alpha 1 chains have also been described. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human COL1a1 and recombinant human COL1a2. Briefly, biotin-linked COL1a1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to COL1a2-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then 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 nm immediately. The binding activity of COL1a1 and COL1a2 was shown in Figure 1, the EC50 for this effect is 10.13 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.