



Rat Collagen alpha-1(I) chain (COL1A1) ELISA kit

Product Code	CSB-E12732r
Abbreviation	COL1A1
Target Name	collagen, type I, alpha 1
Uniprot No.	P02456
Alias	OI4, alpha 1 type I collagen collagen alpha 1 chain type I collagen of skin, tendon and bone, alpha-1 chain pro-alpha-1 collagen type 1,_x000D_ Collagen alpha-1(1) chain (COL1A1),_x000D_ Collagen alpha-1(I) chain (COL1A1)
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Gene Names	Col1a1
Tag Info	quantitative
Protein Description	Sandwich

Description

The rat collagen alpha-1 chain (COL1A1) ELISA Kit is used to quantitatively measure rat COL1A1 concentrations in serum, plasma, or tissue homogenates. It performs well in important characteristics, including sensitivity and specificity. This assay is based on the sandwich ELISA mechanism and enzyme-substrate chromogenic reaction. The solution color develops proportionally to the amount of COL1A1 in the sample. And the intensity of the color can be measured at 450 nm via a microplate reader.

COL1A1 is a major component of collagen type I. It has recently been found that COL1A1 is overexpressed in a variety of tumor tissues and cells such as hepatocellular carcinoma (HCC). Mutations in COL1A1 can cause collagen-related diseases, including autosomal dominant osteogenesis imperfecta (OI) and the rare arthrochalasis subtype of Ehlers-Danlos syndrome (EDS). Liu J *et al.* have demonstrated that a high level of COL1A1 is indicative of a more aggressive cellular behavior and poorer prognosis in patients with breast cancer, especially in those with ER+ breast cancer.



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