## **Product Datasheet**

## Human Collagen alpha-1 (VI) chain (COL6A1) ELISA Kit

Catalog No: #EK11295

Package Size: #EK11295-1 48T #EK11295-2 96T



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Human Collagen alpha-1 (VI) chain (COL6A1) ELISA Kit
ELISA Kit
ELISA
Human (Homo sapiens)
OPLL; alpha 1 (VI) chain (61 AA) collagen VI; alpha-1 polypeptide
P12109
P12109
1291;
The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## Application Details Detect Range:62.5-4000 pg/mL Sensitivity:23.5 pg/mL Sample Type:Serum, Plasma, Other biological fluids Sample Volume: 1-200 µL Assay Time:1-4.5h Detection wavelength:450 nm

## Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate COL6A1 in samples. An antibody specific for COL6A1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyCOL6A1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for COL6A1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of COL6A1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The collagens are a superfamily of proteins that play a role in maintaining the integrity of various tissues. Collagens are extracellular matrix proteins and have a triple-helical domain as their common structural element. Collagen VI is a major structural component of microfibrils. The basic structural unit of collagen VI is a heterotrimer of the alpha1(VI), alpha2(VI), and alpha3(VI) chains are encoded by the COL6A2 and COL6A3 genes, respectively.

The protein encoded by this gene is the alpha 1 subunit of type VI collagen (alpha1(VI) chain). Mutations in the genes that code for the collagen VI subunits result in the autosomal dominant disorder, Bethlem myopathy.Defects in COL6A1 are a cause of Bethlem myopathy (BM).

Note: This product is for in vitro research use only