Human Collagen alpha-3(VI) chain (COL6A3) ELISA kit

Product Code	CSB-EL005753HU
Abbreviation	COL6A3
Protein Biological Process 1	Cell Adhesion
Target Name	collagen, type VI, alpha 3
Uniprot No.	P12111
Alias	DKFZp686D23123, DKFZp686K04147, DKFZp686N0262, FLJ34702, FLJ98399, OTTHUMP00000202895|alpha 3 type VI collagen|collagen VI, alpha-3 polypeptide|collagen alpha-3(VI) chain
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Cell adhesion
Sample Types	serum, plasma, tissue homogenates
Detection Range	1.56 ng/mL-100 ng/mL
Sensitivity	0.39 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	COL6A3
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human COL6A3 ELISA Kit was designed for the quantitative measurement of Human COL6A3 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 1.56 ng/mL-100 ng/mL and the sensitivity is 0.39 ng/mL.
Target Details	This gene encodes the alpha-3 chain, one of the three alpha chains of type VI collagen, a beaded filament collagen found in most connective tissues. The alpha-3 chain of type VI collagen is much larger than the alpha-1 and -2 chains.

This difference in size is largely due to an increase in the number of subdomains, similar to von Willebrand Factor type A domains, that are found in the amino terminal globular domain of all the alpha chains. These domains have been shown to bind extracellular matrix proteins, an interaction that explains the importance of this collagen in organizing matrix components. Mutations in the type VI collagen genes are associated with Bethlem myopathy, a rare autosomal dominant proximal myopathy with early childhood onset. Mutations in this gene are also a cause of Ullrich congenital muscular dystrophy, also referred to as Ullrich scleroatonic muscular dystrophy, an autosomal recessive congenital myopathy that is more severe than Bethlem myopathy. Multiple transcript variants have been identified, but the full-length nature of only some of these variants has been described.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human COL6A3 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	86
	Range %	80-89
1:2	Average %	91
	Range %	87-95
1:4	Average %	92
	Range %	87-98
1:8	Average %	93
	Range %	86-97

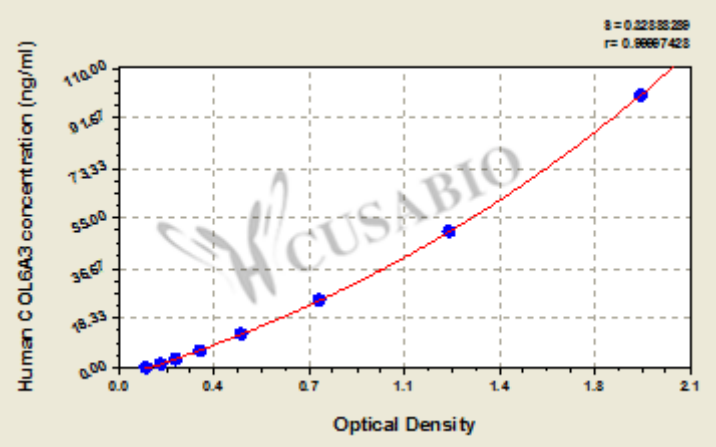
Recovery

The recovery of human COL6A3 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	87	82-91
EDTA plasma (n=4)	102	97-106

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
100	1.988	1.872	1.930	1.821
50	1.192	1.262	1.227	1.118
25	0.724	0.769	0.747	0.638
12.5	0.451	0.467	0.459	0.350
6.25	0.304	0.314	0.309	0.200
3.12	0.217	0.222	0.220	0.111
1.56	0.160	0.169	0.165	0.056
0	0.108	0.109	0.109	?

Msds {"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL005753HU.pdf","filename":"MSDS"}}