



Human Integrin alpha-1(ITGA1) ELISA kit

Product Code	CSB-EL011861HU
Abbreviation	ITGA1
Protein Biological Process 1	Cell Adhesion
Target Name	integrin, alpha 1
Uniprot No.	P56199
Alias	CD49a, VLA1, laminin and collagen receptor very late activation protein 1
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Cell adhesion
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 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	ITGA1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human ITGA1 ELISA Kit was designed for the quantitative measurement of Human ITGA1 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.312 ng/mL-20 ng/mL and the sensitivity is 0.078 ng/mL.
Target Details	This gene encodes the alpha 1 subunit of integrin receptors. This protein heterodimerizes with the beta 1 subunit to form a cell-surface receptor for collagen and laminin. The heterodimeric receptor is involved in cell-cell adhesion and may play a role in inflammation and fibrosis. The alpha 1 subunit contains an inserted (I) von Willebrand factor type I domain which is thought to be involved in collagen binding.
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 ITGA1 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)
	Average %	100
1:1	Range %	100-105
	Average %	94
1:2	Range %	89-98
	Average %	92
1:4	Range %	87-95
	Average %	102
1:8	Range %	94-107

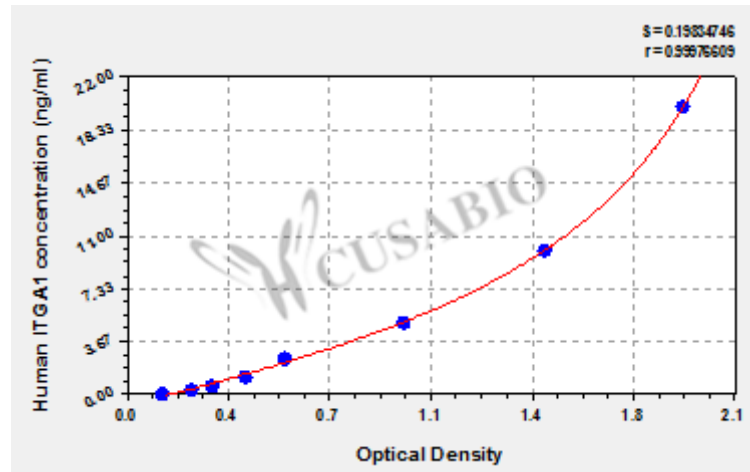
Recovery

The recovery of human ITGA1 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)	97	90-101
EDTA plasma (n=4)	101	95-107

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
20	1.958	1.912	1.935	1.801
10	1.442	1.467	1.455	1.321
5	0.988	0.945	0.967	0.833
2.5	0.562	0.551	0.557	0.423
1.25	0.416	0.423	0.420	0.286
0.625	0.303	0.309	0.306	0.172
0.312	0.236	0.231	0.234	0.100
0	0.133	0.135	0.134	?

Msds

```
{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL011861HU.pdf",
    "filename": "MSDS"
  }
}
```