



Human Bone morphogenetic protein receptor 1A, BMPR-1A ELISA Kit

Product Code	CSB-E04513h
Abbreviation	BMPR1A
Target Name	bone morphogenetic protein receptor, type IA
Uniprot No.	P36894
Alias	10q23del, ACVRLK3, ALK3, CD292, SKR5, OTTHUMP00000020014 activin A receptor, type II-like kinase 3 serine/threonine-protein kinase receptor R5
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates, cell lysates
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	Cardiovascular
Gene Names	BMPR1A
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human BMPR1A ELISA Kit was designed for the quantitative measurement of Human BMPR1A protein in serum, plasma, tissue homogenates, cell lysates. 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	The bone morphogenetic protein (BMP) receptors are a family of transmembrane serine/threonine kinases that include the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. These receptors are also closely related to the activin receptors, ACVR1 and ACVR2. The ligands of these receptors are members of the TGF-beta superfamily. TGF-betas and activins transduce their signals through the formation of heteromeric complexes with 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I
----------------	--



receptors for signaling, whereas type I receptors require their respective type II receptors for ligand 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 BMPR-1A 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 %	81-94
1:2	Average %	95
	Range %	87-98
1:4	Average %	95
	Range %	89-99
1:8	Average %	93
	Range %	86-97

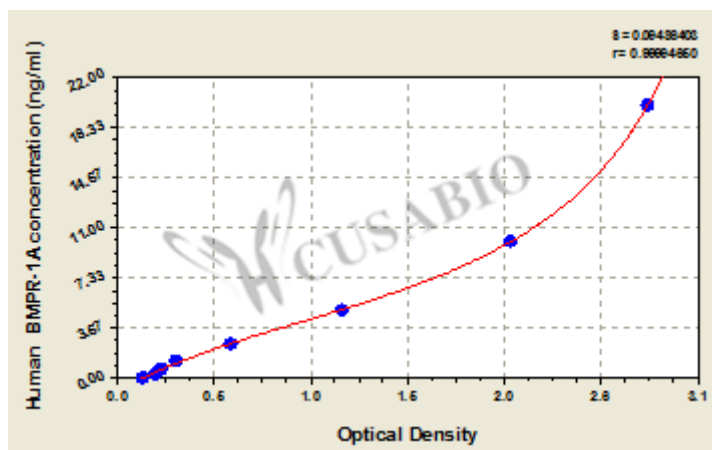
Recovery

The recovery of human BMPR-1A 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)	96	91-102
EDTA plasma (n=4)	89	83-94

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	2.864	2.724	2.794	2.649
10	2.121	2.028	2.075	1.930
5	1.154	1.225	1.190	1.045
2.5	0.604	0.613	0.609	0.464
1.25	0.332	0.316	0.324	0.179
0.625	0.245	0.251	0.248	0.103
0.312	0.212	0.209	0.211	0.066
0	0.146	0.144	0.145	

Msds

```
{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-E04513h.pdf",
    "filename": "MSDS"
  }
}
```