



Human Fragile X mental retardation 1 protein(FMR1) ELISA kit

Product Code	CSB-EL008756HU
Abbreviation	FMR1
Protein Biological Process 1	Transport
Target Name	fragile X mental retardation 1
Uniprot No.	Q06787
Alias	FMRP, FRAXA, MGC87458, POF, POF1, premature ovarian failure 1
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Transport
Sample Types	serum, plasma, tissue homogenates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 pg/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	FMR1
Tag Info	quantitative
Protein Description	Sandwich

Description

This Human FMR1 ELISA Kit was designed for the quantitative measurement of Human FMR1 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 3.9 pg/mL.

Target Details

This protein binds RNA and is associated with polysomes. The encoded protein may be involved in mRNA trafficking from the nucleus to the cytoplasm. A trinucleotide repeat (CGG) in the 5' UTR is normally found at 6-53 copies, but an expansion to 55-230 repeats is the cause of fragile X syndrome. Expansion of the trinucleotide repeat may also cause one form of premature ovarian failure



(POF1).

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 FMR1 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 %	89
	Range %	85-93
1:2	Average %	107
	Range %	99-111
1:4	Average %	92
	Range %	85-95
1:8	Average %	99
	Range %	91-103

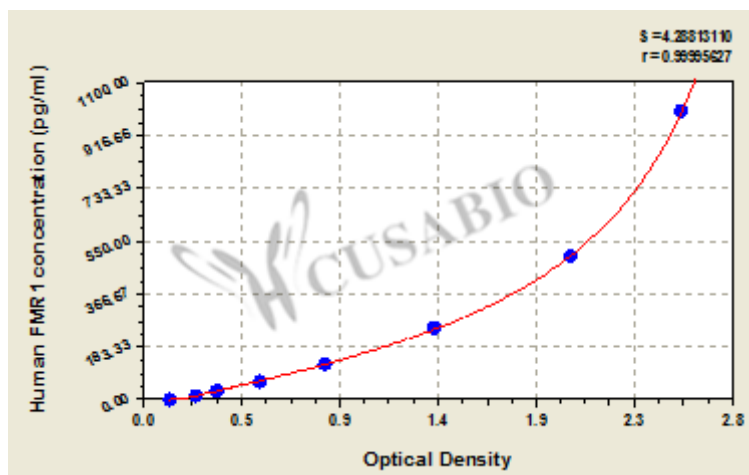
Recovery

The recovery of human FMR1 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)	91	85-95
EDTA plasma (n=4)	98	90-101

Typical

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



pg/ml	OD1	OD2	Average	Corrected
1000	2.554	2.522	2.538	2.399
500	2.034	2.008	2.021	1.882
250	1.385	1.367	1.376	1.237
125	0.871	0.854	0.863	0.724
62.5	0.556	0.566	0.561	0.422
31.2	0.352	0.367	0.360	0.221
15.6	0.264	0.259	0.262	0.123
0	0.141	0.137	0.139	

Msds

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