



# Human Protein-glutamine gamma-glutamyltransferase K(TGM1) ELISA kit

Product Code	CSB-EL023461HU
Abbreviation	TGM1
Protein Biological Process 1	Developmental Protein
Target Name	transglutaminase 1 (K polypeptide epidermal type I, protein-glutamine-gamma-glutamyltransferase)
Uniprot No.	P22735
Alias	ICR2, KTG, LI, LI1, TGASE, TGK, TGase K epidermal TGase transglutaminase 1 transglutaminase K transglutaminase, keratinocyte
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Keratinization
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	25 pg/mL-1600 pg/mL
Sensitivity	6.25 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	TGM1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human TGM1 ELISA Kit was designed for the quantitative measurement of Human TGM1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 25 pg/mL-1600 pg/mL and the sensitivity is 6.25 pg/mL.
Target Details	This protein is a membrane protein that catalyzes the addition of an alkyl group from an alkylamine to a glutamine residue of a protein, forming an alkylglutamine in the protein. This protein alkylation leads to crosslinking of proteins and



catenation of polyamines to proteins. This gene contains either one or two copies of a 22 nt repeat unit in its 3' UTR. Mutations in this gene have been associated with autosomal recessive lamellar ichthyosis (LI) and nonbullous congenital ichthyosiform erythroderma (NCIE).

## 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 TGM1 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 %	87
	Range %	84-90
1:2	Average %	103
	Range %	98-106
1:4	Average %	108
	Range %	104-112
1:8	Average %	83
	Range %	80-86

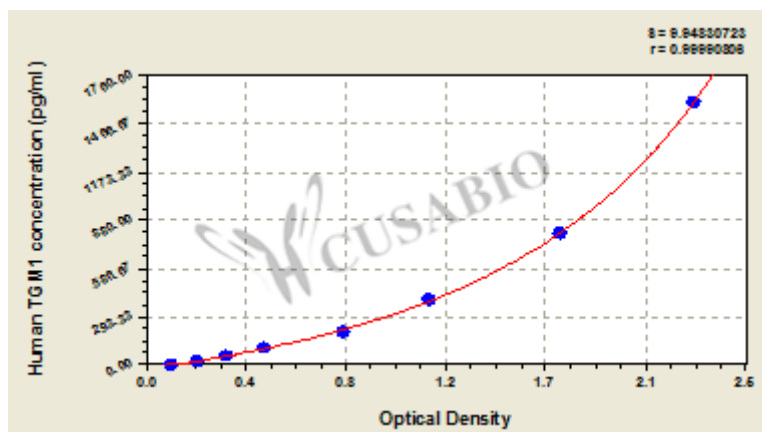
## Recovery

The recovery of human TGM1 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)	89	85-96
EDTA plasma (n=4)	100	97-103

## 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
1600	2.215	2.301	2.258	2.145
800	1.718	1.702	1.710	1.597
400	1.137	1.204	1.171	1.058
200	0.802	0.831	0.817	0.704
100	0.499	0.489	0.494	0.381
50	0.335	0.342	0.339	0.226
25	0.213	0.231	0.222	0.109
0	0.112	0.114	0.113	?

## Msds

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