ARG81565
Human ADAMTS4 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81565-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81565-002	Standard	2 X 40 ng/vial	4°C
ARG81565-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81565-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81565-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81565-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81565-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81565-008	25X Wash buffer	20 ml	4°C
ARG81565-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81565-010	STOP solution	10 ml (Ready to use)	4°C
ARG81565-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81565 Human ADAMTS4 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human ADAMTS4 in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	ADAMTS4
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	312.5 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	625 - 40000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 4.7% Inter-Assay CV: 5.8%
Alternate Names	ADAMTS-4; Aggrecanase-1; ADAMTS-2; EC 3.4.24.82; A disintegrin and metalloproteinase with thrombospondin motifs 4; ADAM-TS4; ADMP-1; ADAM-TS 4

Application Instructions

Assay Time	~ 5 hours

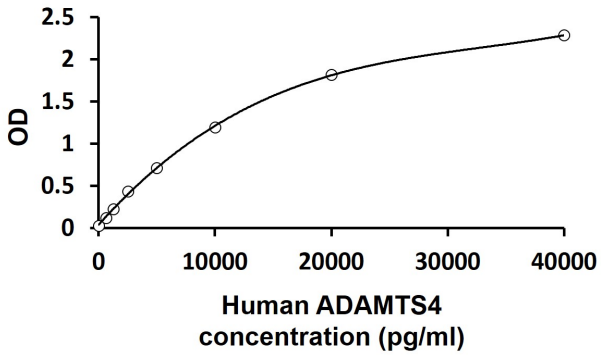
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	ADAMTS4
Gene Full Name	ADAM metallopeptidase with thrombospondin type 1 motif, 4
Background	This gene encodes a member of the ADAMTS (a disintegrin and metalloproteinase with thrombospondin motifs) protein family. Members of the family share several distinct protein modules, including a propeptide region, a metalloproteinase domain, a disintegrin-like domain, and a thrombospondin type 1 (TS) motif. Individual members of this family differ in the number of C-terminal TS motifs, and some have unique C-terminal domains. The enzyme encoded by this gene lacks a C-terminal TS motif. It is responsible for the degradation of aggrecan, a major proteoglycan of cartilage, and brevican, a brain-specific extracellular matrix protein. The cleavage of aggrecan and brevican suggests key roles of this enzyme in arthritic disease and in the central nervous system, potentially, in the progression of glioma. [provided by RefSeq, Jul 2008]
Function	Cleaves aggrecan, a cartilage proteoglycan, and may be involved in its turnover. May play an important role in the destruction of aggrecan in arthritic diseases. Could also be a critical factor in the exacerbation of neurodegeneration in Alzheimer disease. Cleaves aggrecan at the '392-Glu-|-Ala-393' site. [UniProt]
Highlight	Related products: ADAMTS antibodies; ADAMTS ELISA Kits; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	The precursor is cleaved by a furin endopeptidase. Glycosylated. Can be O-fucosylated by POFUT2 on a serine or a threonine residue found within the consensus sequence C1-X(2)-(S/T)-C2-G of the TSP type-1 repeat domains where C1 and C2 are the first and second cysteine residue of the repeat, respectively. Fucosylated repeats can then be further glycosylated by the addition of a beta-1,3-glucose residue by the glucosyltransferase, B3GALTL. Fucosylation mediates the efficient secretion of ADAMTS family members. Also can be C-glycosylated with one or two mannose molecules on tryptophan residues within the consensus sequence W-X-X-W of the TPRs, and N-glycosylated. These other glycosylations can also facilitate secretion (By similarity). [UniProt]

Images



ARG81565 Human ADAMTS4 ELISA Kit standard curve image

ARG81565 Human ADAMTS4 ELISA Kit results of a typical standard run with optical density reading at 450 nm.