

ARG81612 Human alpha 1 microglobulin ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81612-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81612-002	Standard	2 X 10 ng/vial	4°C
ARG81612-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81612-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81612-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81612-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81612-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81612-008	25X Wash buffer	20 ml	4°C
ARG81612-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81612-010	STOP solution	10 ml (Ready to use)	4°C
ARG81612-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81612 Human alpha 1 microglobulin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human alpha 1 microglobulin 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	alpha 1 microglobulin
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	7.8 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	15.6 - 1000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 6.3% Inter-Assay CV: 6.7%
Alternate Names	Bikunin; HCP; ITIL; ITILC; ITI; ITI-LC; UTI; Protein HC; Complex-forming glycoprotein heterogeneous in charge; EDC1; HI30; HI-30; Alpha-1 microglycoprotein; A1M; IATIL; Uronic-acid-rich protein; Protein AMBP

Application Instructions

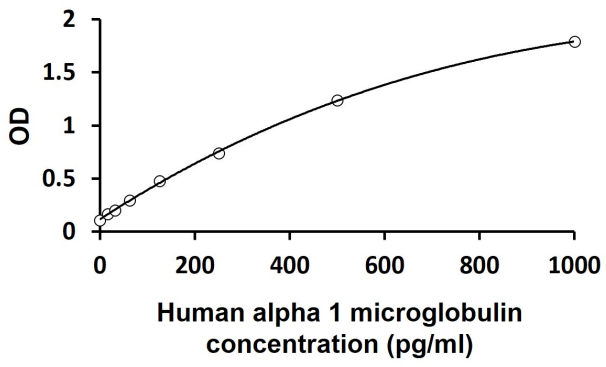
Assay Time	~ 5 hours
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Properties

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	AMBP
Gene Full Name	alpha-1-microglobulin/bikunin precursor
Background	This gene encodes a complex glycoprotein secreted in plasma. The precursor is proteolytically processed into distinct functioning proteins: alpha-1-microglobulin, which belongs to the superfamily of lipocalin transport proteins and may play a role in the regulation of inflammatory processes, and bikunin, which is a urinary trypsin inhibitor belonging to the superfamily of Kunitz-type protease inhibitors and plays an important role in many physiological and pathological processes. This gene is located on chromosome 9 in a cluster of lipocalin genes. [provided by RefSeq, Jul 2008]
Function	Inter-alpha-trypsin inhibitor inhibits trypsin, plasmin, and lysosomal granulocytic elastase. Inhibits calcium oxalate crystallization. Trypstatin is a trypsin inhibitor. [UniProt]
Highlight	Related products: alpha 1 microglobulin antibodies ; alpha 1 microglobulin ELISA Kits ; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	The precursor is proteolytically processed into separately functioning proteins. 3-hydroxykynurenine, an oxidized tryptophan metabolite that is common in biological fluids, reacts with Cys-53, Lys-111, Lys-137, and Lys-149 to form heterogeneous polycyclic chromophores including hydroxanthommatin. The reaction by alpha-1-microglobulin is autocatalytic; the human protein forms chromophore even when expressed in insect and bacterial cells. The chromophore can react with accessible cysteines forming non-reducible thioether cross-links with other molecules of alpha-1-microglobulin or with other proteins such as Ig alpha-1 chain C region 'Cys-352'. Heavy chains are interlinked with bikunin via a chondroitin 4-sulfate bridge to the their C-terminal aspartate. N- and O-glycosylated. N-glycan heterogeneity at Asn-115: Hex5HexNAc4 (major), Hex6HexNAc5 (minor) and dHex1Hex6HexNAc5 (minor). N-glycan at Asn-250: Hex5HexNAc4. O-linkage of the glycosaminoglycan, chondroitin sulfate, at Ser-215 allows cross-linking between the three polypeptide chains. [UniProt]



ARG81612 Human alpha 1 microglobulin ELISA Kit standard curve image

ARG81612 Human alpha 1 microglobulin ELISA Kit results of a typical standard run with optical density reading at 450 nm.