ARG82370
Human Tamm Horsfall Glycoprotein ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82370-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82370-002	Standard	2 X 10 ng/vial	4°C
ARG82370-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82370-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82370-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82370-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82370-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82370-008	25X Wash buffer	20 ml	4°C
ARG82370-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82370-010	STOP solution	10 ml (Ready to use)	4°C
ARG82370-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82370 Human Tamm Horsfall Glycoprotein ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Tamm Horsfall Glycoprotein in serum, plasma (heparin) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Tamm Horsfall Glycoprotein
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	78 pg/ml
Sample Type	Serum, plasma (heparin) and cell culture supernatants.
Standard Range	156 - 10000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.2%

	Inter-Assay CV: 6.4%
Alternate Names	Uromodulin; HNFJ; MCKD2; THGP; HNFJ1; FJHN; THP; Tamm-Horsfall urinary glycoprotein; ADMCKD2

Application Instructions

Assay Time	~ 5 hours

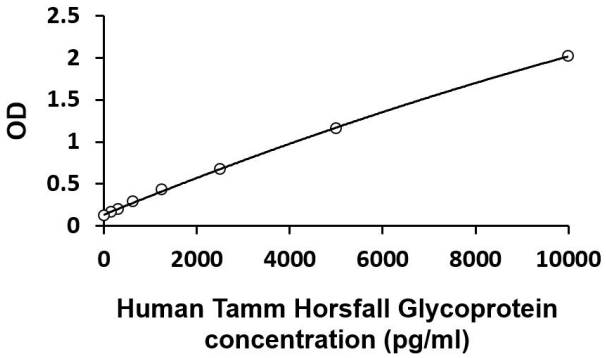
Properties

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	UMOD
Gene Full Name	uromodulin
Background	The protein encoded by this gene is the most abundant protein in mammalian urine under physiological conditions. Its excretion in urine follows proteolytic cleavage of the ectodomain of its glycosyl phosphatidylinositol-anchored counterpart that is situated on the luminal cell surface of the loop of Henle. This protein may act as a constitutive inhibitor of calcium crystallization in renal fluids. Excretion of this protein in urine may provide defense against urinary tract infections caused by uropathogenic bacteria. Defects in this gene are associated with the renal disorders medullary cystic kidney disease-2 (MCKD2), glomerulocystic kidney disease with hyperuricemia and isosthenuria (GCKDHI), and familial juvenile hyperuricemic nephropathy (FJHN). Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2013]
Function	Uromodulin: Functions in biogenesis and organization of the apical membrane of epithelial cells of the thick ascending limb of Henle's loop (TALH), where it promotes formation of complex filamentous gel-like structure providing the water barrier permeability. May serve as a receptor for binding and endocytosis for cytokines (IL-1, IL-2) and TNF. Facilitates neutrophil migration across renal epithelial. Uromodulin, secreted form: Secreted into urine after proteolytically cleaveage. Into the urine, may contribute to colloid osmotic pressure, retards passage of positively charged electrolytes, prevents urinary tract infection and modulates formation of supersaturated salts and their crystals. [UniProt]
Highlight	Related products: Glycoprotein antibodies; Glycoprotein ELISA Kits; Glycoprotein Duos / Panels; Glycoprotein recombinant proteins; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	N-glycosylated (PubMed:19005207, PubMed:26673890, PubMed:26811476). N-glycan heterogeneity at Asn-232: Hex7HexNAc6 (major) and dHex1Hex7HexNAc6 (minor); at Asn-322: dHex1Hex6HexNAc5 (minor), dHex1Hex7HexNAc6 (major) and dHex1Hex8HexNAc7 (minor); at Asn-396: Hex6HexNAc5 (major), dHex1Hex6HexNAc5 (minor) and Hex7HexNAc6 (minor) (PubMed:22171320). Proteolytically cleaved at a conserved C-terminal proteolytic cleavage site to generate the secreted form found in urine (PubMed:18375198, PubMed:19005207). This cleavage is catalyzed by HPN (PubMed:26673890). [UniProt]
Cellular Localization	Apical cell membrane; Lipid-anchor, GPI-anchor. Basolateral cell membrane; Lipid-anchor, GPI-anchor. Cell projection, cilium membrane. Note=Only a small fraction sorts to the basolateral pole of tubular epithelial cells compared to apical localization (PubMed:22776760). Secreted into urine after cleavage (PubMed:18375198, PubMed:26811476). Colocalizes with NPHP1 and KIF3A (PubMed:20172860). Uromodulin, secreted form: Secreted. Note=Detected in urine. [UniProt]

Images



ARG82370 Human Tamm Horsfall Glycoprotein ELISA Kit standard curve image

ARG82370 Human Tamm Horsfall Glycoprotein ELISA Kit results of a typical standard run with optical density reading at 450 nm.