

ARG81668 Mouse OPN / Osteopontin ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81668-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81668-002	Standard	2 X 10 ng/vial	4°C
ARG81668-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81668-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81668-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81668-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81668-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81668-008	25X Wash buffer	20 ml	4°C
ARG81668-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81668-010	STOP solution	10 ml (Ready to use)	4°C
ARG81668-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81668 Mouse OPN / Osteopontin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse OPN / Osteopontin in serum, plasma (heparin, EDTA), urine and cell culture supernatants.
Tested Reactivity	Ms
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	OPN / Osteopontin
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	78 pg/ml
Sample Type	Serum, plasma (heparin, EDTA), urine and cell culture supernatants.
Standard Range	156 - 10000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 6.1%; Inter-Assay CV: 7.0%
Alternate Names	BSPI; ETA-1; Uropontin; Osteopontin; Nephropontin; SPP-1; Bone sialoprotein 1; BNSP; Urinary stone protein; OPN; Secreted phosphoprotein 1

Application Instructions

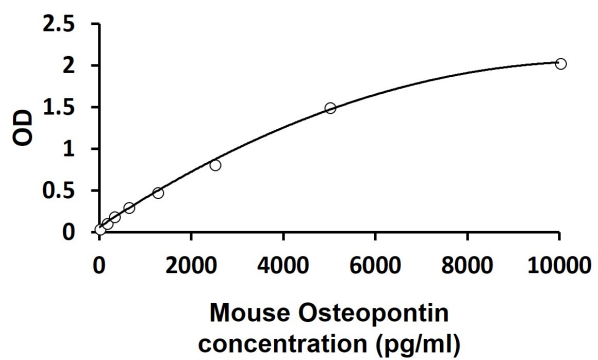
Assay Time	~ 5 hours
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Properties

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	SPP1
Gene Full Name	secreted phosphoprotein 1
Background	The protein encoded by this gene is involved in the attachment of osteoclasts to the mineralized bone matrix. The encoded protein is secreted and binds hydroxyapatite with high affinity. The osteoclast vitronectin receptor is found in the cell membrane and may be involved in the binding to this protein. This protein is also a cytokine that upregulates expression of interferon-gamma and interleukin-12. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]
Function	<p>Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to cell-matrix interaction.</p> <p>Acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type I immunity. [UniProt]</p>
Highlight	<p>Related products: OPN antibodies; OPN ELISA Kits;</p> <p>Related news: Detecting MMPs and their non-ECM substrates The role of HDGF in tumor angiogenesis</p> <p>New ELISA data calculation tool: Simplify the ELISA analysis by GainData</p>
PTM	<p>Extensively phosphorylated by FAM20C in the extracellular medium at multiple sites within the S-x-E/pS motif.</p> <p>N- and O-glycosylated. Isoform 5 is GalNAc O-glycosylated at Thr-59 or Ser-62. [UniProt]</p>



ARG81668 Mouse OPN / Osteopontin ELISA Kit standard curve image

ARG81668 Mouse OPN / Osteopontin ELISA Kit results of a typical standard run with optical density reading at 450 nm.