

ARG82316 Rat OPN / Osteopontin ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG82316 Rat OPN / Osteopontin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat OPN / Osteopontin in serum, plasma and cell culture supernatants.
Tested Reactivity	Rat
Tested Application	ELISA
Specificity	Not react with following recombinant Rat proteins: Adiponectin, ApoAI, BMP1, BMP2, BMP3, BMP4, BMP5, BMP7, CCL2, CCL4, CCL5, CRP, HSP27, HGF, IL1 beta, IL1RA, IL2, IL4, IL5, sIL6R, IL8, IL10, IL12, IL13, IL15, IL17C, IL21, IL23, IFN gamma, MMP2, MMP9, IL2R, PDGF, serpin E1, TGF beta 1, TGF beta 2, TGF beta 3, TLR1, TLR2, TLR3, TLR9, TNF alpha, TNF RI, TNF RII, VEGF and VEGF R1.
Target Name	OPN / Osteopontin
Conjugation	HRP
Conjugation Note	Read at 450 nm.
Sensitivity	39 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	78 - 5000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5% Inter-Assay CV: 10%
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	~ 3 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 Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to cell-matrix interaction.

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]

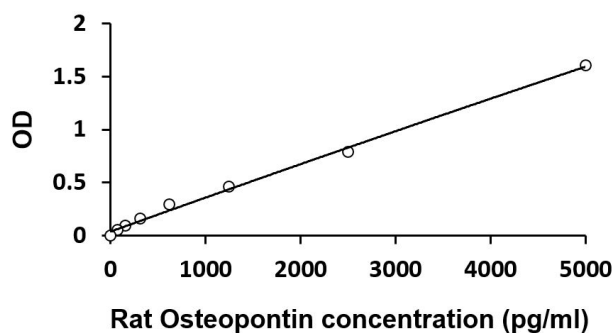
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PTM Extensively phosphorylated by FAM20C in the extracellular medium at multiple sites within the S-x-E/pS motif.

N- and O-glycosylated. Isoform 5 is GalNAc O-glycosylated at Thr-59 or Ser-62. [UniProt]

Cellular Localization Secreted. [UniProt]

Images



ARG82316 Rat OPN / Osteopontin ELISA Kit standard curve image

ARG82316 Rat OPN / Osteopontin ELISA Kit results of a typical standard run with optical density reading at 450 nm.