

Human OPN ELISA Kit | SPP1 elisa kit

Human OPN PicoKine ELISA Kit

CATALOG #
AAA45264

REACTIVITY
Human

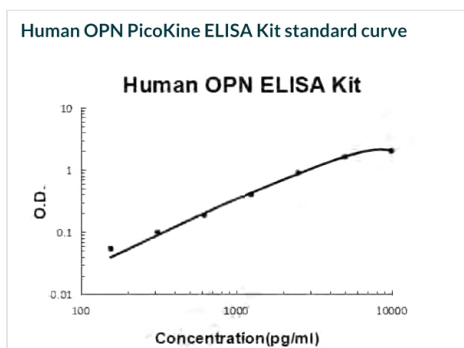
PRODUCT SYNONYMS

OPN; Human OPN PicoKine ELISA Kit; Osteopontin; secreted phosphoprotein 1; BNSP; Bone sialoprotein 1; Bone sialoprotein I; BSPI; Early T lymphocyte activation 1; ETA 1; MGC110940; Nephropontin; OSTP_HUMAN; Secreted phosphoprotein 1; Secreted phosphoprotein 1 (osteopontin bone sialoprotein I early T lymphocyte activation 1); Secreted phosphoprotein 1 (osteopontin bone sialoprotein); SPP-1; SPP1; Urinary stone protein; Uropontin; SPP1 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human SPP1
Sequence Length	314
Samples	Cell culture supernatants, serum, plasma (heparin, EDTA), human milk and urine
Detection Range	156 pg/ml - 10,000 pg/ml
Sensitivity	<10 pg/ml
Intra-assay Precision	Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles (Shipped with wet ice.)

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for SPP1 elisa kit	Background: Osteopontin (OPN) also called urinary stone protein, secreted phosphoprotein 1 (SPP1), bone sialoprotein, and early T lymphocyte activation 1 (ETA1). Osteopontin is a phosphorylated glycoprotein secreted to the mineralizing extracellular matrix by osteoblasts during bone development. It is believed to facilitate the attachment of osteoblasts and osteoclasts to the extracellular matrix, allowing them to perform their respective functions during osteogenesis. Osteopontin is presumably involved in stone formation as stone matrix. The deduced protein sequence reveals a 317-amino acid protein (34,982 Da) containing a 16-amino acid hydrophobic signal sequence and a 33,352-Da protein destined to undergo extensive post-translational modifications before being secreted from the cell. The gene is located on human chromosome 4. The standard product used in this kit is recombinant human OPN, consisting of 17-314 amino acid sequence with the molecular mass of 32.9KDa. As a result of glycosylation, the molecular mass is 60-65KDa. Principle of the Assay: The Picokine™ Human SPP1 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid-phase immunoassay specially designed to measure Human SPP1 with a 96-well strip plate that is pre-coated with antibody specific for SPP1. The detection antibody is a biotinylated antibody specific for SPP1. The capture antibody is monoclonal antibody from mouse and the detection antibody is polyclonal antibody from goat. The kit contains recombinant Human SPP1 with immunogen: Expression system for standard: NS0; Immunogen sequence: I17-N300. The kit is analytically validated with ready-to-use reagents. To measure Human SPP1, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbound ABC-HRP with PBS or TBS buffer and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product at 450nm is linearly proportional to Human SPP1 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human SPP1 in the sample.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	129260
NCBI GeneID	6696
UniProt Accession #	P10451; Q15681; Q15682; Q15683; Q4W597; Q567T5; Q8NBK2; Q96IZ1; B2RDA1
Molecular Weight	33,843 Da
NCBI Official Full Name	Osteopontin
NCBI Official Synonym Full Names	secreted phosphoprotein 1
NCBI Official Symbol	SPP1
NCBI Official Synonym Symbols	OPN; BNSP; BSP1; ETA-1
NCBI Protein Information	osteopontin; uropontin; nephropontin; SPP1/CALPHA1 fusion; urinary stone protein; early T-lymphocyte activation 1; osteopontin/immunoglobulin alpha 1 heavy chain constant region fusion protein; secreted phosphoprotein 1 (osteopontin, bone sialoprotein I, early T-lymphocyte activation 1)
UniProt Protein Name	Osteopontin
UniProt Gene Name	SPP1
UniProt Synonym Gene Names	BNSP; OPN; SPP-1
UniProt Entry Name	OSTP_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.