

Datasheet for KOA0287**Human OPN ELISA Kit****Overview**

Description:	Human OPN AccuSignal ELISA Kit - KOA0287
Item No.:	KOA0287
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	156 pg/ml - 10000 pg/ml

Product Details

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.
Synonyms:	BNSP, Bone sialoprotein 1, Bone sialoprotein I, BSPI, Early T lymphocyte activation 1, ETA 1, MGC110940, Nephropontin, OPN, Osteopontin, 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
Detection Kit Type:	ELISA Kit
Detection Range:	156 pg/ml - 10000 pg/ml
Sensitivity:	<10 pg/ml

Target Details

Gene Name:	SPP1
Reactivity:	Human
Immunogen:	Expression system for standard: NSO; Immunogen sequence: I17-N300
Purity/Specificity:	Natural and recombinant human OPN. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P10451 • NCBI - NP_000573.1 • GeneID - 6696 • KOA0287 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 10000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312pg/ml, 156pg/ml human OPN standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernatants, serum, plasma(heparin, EDTA), milk or urine to each empty well. It is recommended that each human OPN standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	DOE @ 4°C: 09/18/2024 @-20°: 03/18/2025

Formulation

Concentration:	1 Kit
Anticoagulant:	Heparin Sodium

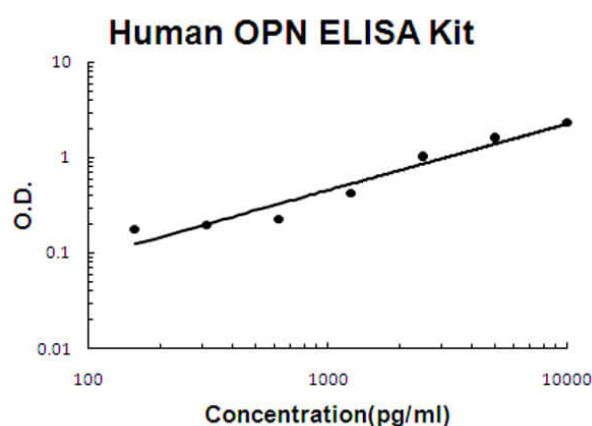
Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition: Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

Expiration: See kit insert for complete instructions.

Images



ELISA

Human OPN AccuSignal ELISA Kit standard curve.

Assay Range: 156pg/ml-10000pg/ml. Sensitivity: <10pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.