

Rat Osteocalcin (OC) ELISA Kit | OC elisa kit

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CATALOG #
AAA20608

REACTIVITY
Rat

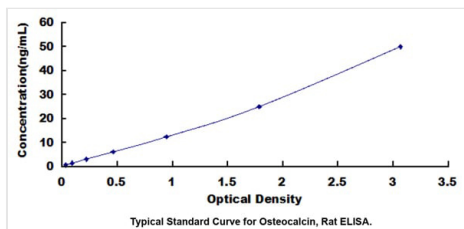
PRODUCT SYNONYMS

Osteocalcin (OC); Rat Osteocalcin (OC) ELISA Kit; BGLAP; OT; BGP; Bone Gla Protein; Bone Gamma-Carboxyglutamate Protein; Gamma-carboxyglutamic acid-containing protein; OC elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of osteocalcin. No significant cross-reactivity or interference between osteocalcin and analogues was observed.
Sequence Length	100
Assay Type	Quantitative Sandwich
Samples	Rat serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids
Detection Range	0.78-50ng/mL
Sensitivity	< 0.30ng/mL
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level osteocalcin were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level osteocalcin were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for OC elisa kit	Principle of the Assay: The microplate provided in this kit has been pre-coated with an antibody specific to osteocalcin. Standards or samples are then added to the appropriate microplate wells with a biotin-conjugated antibody specific to osteocalcin. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain osteocalcin, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm $\pm$ 10nm. The concentration of osteocalcin in the samples is then determined by comparing the O.D. of the samples to the standard curve. Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of osteocalcin in rat serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids.
Product Categories/Family for OC elisa kit	Metabolic pathway ; Endocrinology ; Hormone metabolism ; Bone metabolism
References	Osteocalcin Ameliorates Motor Dysfunction in a 6-Hydroxydopamine-Induced Parkinson's Disease Rat Model Through AKT/GSK3beta Signaling ; Front Mol Neurosci ; 2018 Sep 27;11:343.; PMID: 30319352; Xing-Zhi Guo; Department of Endocrine and Metabolic Diseases, Shanghai Clinical Center for Endocrine and Metabolic Diseases, Rujin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai Institute of Endocrine and Metabolic Diseases, Shanghai, China.

NCBI AND UNIPROT INFORMATION

NCBI GI #	40316933
NCBI GeneID	632
NCBI Accession #	NP_954642.1
NCBI GenBank Nucleotide #	NM_199173.5
UniProt Accession #	P02818; Q5TCK6
Molecular Weight	10,963 Da
NCBI Official Full Name	osteocalcin preproprotein
NCBI Official Synonym Full Names	bone gamma-carboxyglutamate (gla) protein
NCBI Official Symbol	BGLAP
NCBI Official Synonym Symbols	OC; BGP; OCN
NCBI Protein Information	osteocalcin
UniProt Protein Name	Osteocalcin
UniProt Gene Name	BGLAP
UniProt Synonym Gene Names	BGP
UniProt Entry Name	OSTCN_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.

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Online datasheet: <https://stage.aaabiotech.com/rat-elisa-kits/osteocalcin-oc/20608>