SANTA CRUZ BIOTECHNOLOGY, INC.

OPN (K-20): sc-10591

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Osteopontin (OPN, also designated bone sialoprotein 1, urinary stone protein, spp-1, Eta-1, nephropontin, uropontin) is an extracellular matrix cell adhesion phosphoglycoprotein. OPN is deposited into unmineralized matrix prior to calcification leading to localization at various tissue interfaces including cement lines, lamina limitans, and between collagen fibrils of fully matured hard tissues. While OPN is a major product of osteoblasts, it is also synthesized by brain and kidney cells. OPNs isolated from or secreted by various tissues ranges in molecular weight due to post-translational modifications. OPN functions as a substrate for transglutaminase and is involved in cell adhesion, chemoattraction and immunomodulation.

CHROMOSOMAL LOCATION

Genetic locus: SPP1 (human) mapping to 4q22.1.

SOURCE

OPN (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of OPN of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10591 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OPN (K-20) is recommended for detection of all OPN isoforms of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for OPN siRNA (h): sc-36129, OPN shRNA Plasmid (h): sc-36129-SH and OPN shRNA (h) Lentiviral Particles: sc-36129-V.

Molecular Weight of OPN precursor: 66 kDa.

Molecular Weight of OPN cleavage product: 25-55 kDa.

Positive Controls: U-87 MG cell lysate: sc-2411, HOS cell lysate: sc-2275 or CCD-1064Sk cell lysate: sc-2263.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

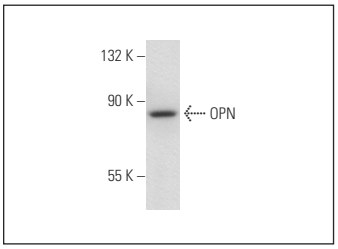
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



OPN (K-20): sc-10591. Western blot analysis of OPN expression in 293T whole cell lysate.

SELECT PRODUCT CITATIONS

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