



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# OPN (h3): 293 Lysate: sc-159937

## BACKGROUND

Osteopontin (OPN, also designated bone sialoprotein 1, urinary stone protein, spp-1, Eta-1, nephropontin or 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.

## REFERENCES

- Butler, W.T. 1989. The nature and significance of osteopontin. *Connect. Tissue Res.* 23: 123-136.
- Singh, R.P., et al. 1990. Definition of a specific interaction between the early T lymphocyte activation 1 (Eta-1) protein and murine macrophages *in vitro* and its effect upon macrophages *in vivo*. *J. Exp. Med.* 171: 1931-1942.
- Prince, C.W., et al. 1991. Osteopontin, a substrate for transglutaminase and factor XIII activity. *Biochem. Biophys. Res. Commun.* 177: 1205-1210.
- Denhardt, D.T., et al. 1993. Osteopontin: a protein with diverse functions. *FASEB J.* 7: 1475-1482.
- Butler, W.T. 1995. Structural and functional domains of osteopontin. *Ann. N.Y. Acad. Sci.* 760: 6-11.
- Weber, G.F., et al. 1996. The immunology of Eta-1/osteopontin. *Cytokine Growth Factor Rev.* 7: 241-248.
- McKee, M.D., et al. 1996. Osteopontin at mineralized tissue interfaces in bone, teeth, and osseointegrated implants: ultrastructural distribution and implications for mineralized tissue formation, turnover, and repair. *Microsci. Res. Tech.* 33: 141-164.
- Nemir, M., et al. 1998. Normal rat kidney cells secrete both phosphorylated and nonphosphorylated forms of osteopontin showing different physiological properties. *J. Biol. Chem.* 264: 18202-18208.

## CHROMOSOMAL LOCATION

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

## PRODUCT

OPN (h3): 293 Lysate represents a lysate of human OPN transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## APPLICATIONS

OPN (h3): 293 Lysate is suitable as a Western Blotting positive control for human reactive OPN antibodies. Recommended use: 10-20 µl per lane.

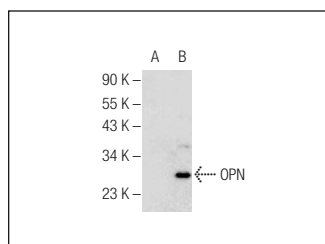
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

OPN (LFMb-14): sc-73631 is recommended as a positive control antibody for Western Blot analysis of enhanced human OPN expression in OPN transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



OPN (LFMb-14): sc-73631. Western blot analysis of OPN expression in non-transfected: sc-110760 (A) and human OPN transfected: sc-159937 (B) 293 whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.