



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# OPN (m): 293T Lysate: sc-122246

## BACKGROUND

Osteopontin (OPN), also designated bone sialoprotein 1, urinary stone protein, SPP-1, ETA-1, nephropontin and 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. OPN isolated from or secreted by various tissues ranges in molecular weight due to posttranslational 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. *Microsc. 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 (mouse) mapping to 5 E5.

## PRODUCT

OPN (m): 293T Lysate represents a lysate of mouse OPN transfected 293T 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.

## PROTOCOLS

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

## APPLICATIONS

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

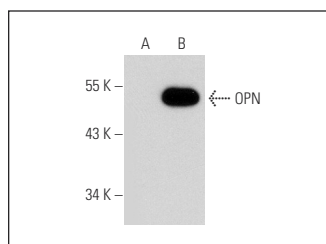
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

OPN (AKm2A1): sc-21742 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse OPN expression in OPN transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

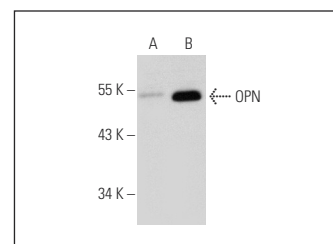
## RECOMMENDED SUPPORT REAGENTS

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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## DATA



OPN (AKm2A1): sc-21742. Western blot analysis of OPN expression in non-transfected: sc-117752 (A) and mouse OPN transfected: sc-122246 (B) 293T whole cell lysates.



OPN (LFMb-14): sc-73631. Western blot analysis of OPN expression in non-transfected: sc-117752 (A) and mouse OPN transfected: sc-122246 (B) 293T whole cell lysates.

## RESEARCH USE

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