

# Osteopontin

## monoclonal antibody

### (53)

Osteopontin (OPN) is an acidic extracellular matrix cell adhesion protein that is relatively abundant not only in bone matrix, plasma, urine, and milk, but is also found in malignant and atherogenic tissues. Phosphorylation, glycosylation and calcium modifications allow intact and fragmented Osteopontin to direct a variety of diverse responses including tissue remodeling, inflammation and cell survival. Plasma Osteopontin has been shown to provide prognostic information in breast, prostate, colon, and lung cancers as well as metastatic carcinomas. The notable presence of Osteopontin in a variety of tumors is strongly correlated to pathological stage, suggesting its critical role in tumor invasiveness, progression and metastasis. In addition, Osteopontin inhibits inducible nitric oxide synthase activity, thereby protecting tumor cells from NO-mediated macrophage cytotoxic attack. Osteopontin is found in atherosclerotic plaques and may drive a number of diabetic vascular pathologies.

This antibody is covered by our [Worry-Free Guarantee](#).

Citations: 13

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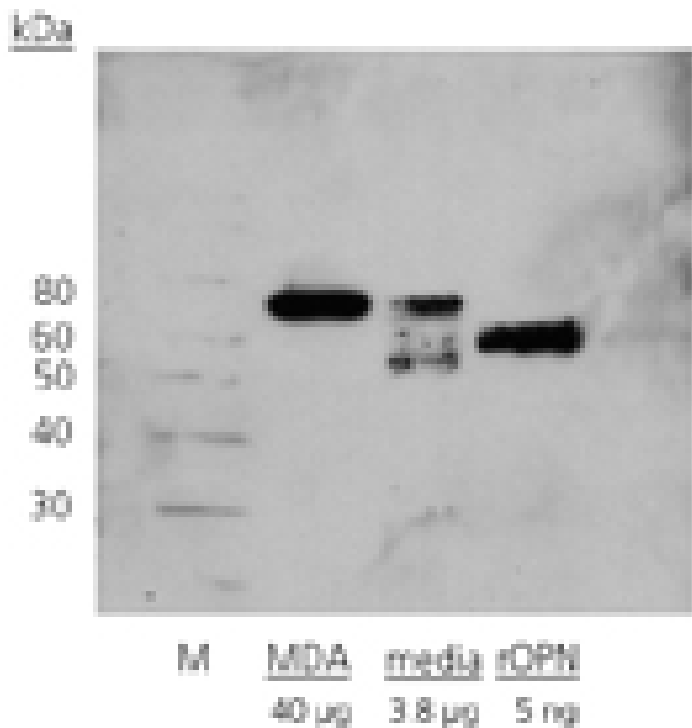
## Ordering Information

[Order Online »](#)

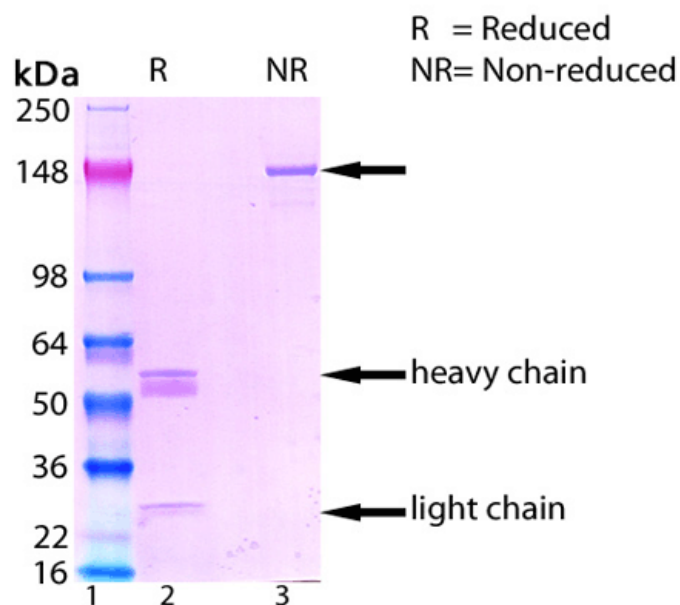
ADI-905-629-100	100µg
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Manuals, SDS & CofA

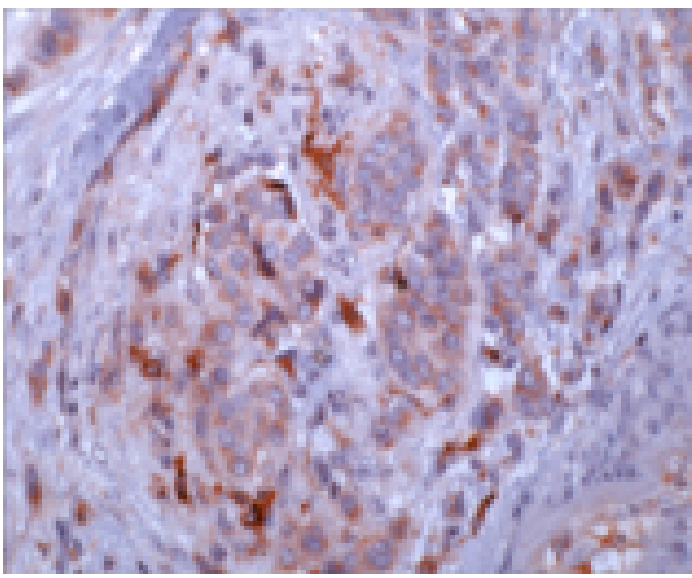
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Western blot analysis: Protein samples (MDA-MB-435 cell lysates, conditioned medium from MDA-MB-435 cells containing secreted OPN or recombinant protein) were resolved by SDS-PAGE on a 8-16% gradient gel, transferred to nitrocellulose, and blocked for 2 hrs in Tris-buffered saline containing 0.05% Tween 20 (TBS-T) and 5% milk powder. For immunodetection, Blots were incubated with anti-OPN 53 (5µg/ml) overnight at 4°C, followed by incubation with a HRP-conjugated goat anti-mouse secondary antibody (in TBS-T) for 1 hr at room temperature. Protein bands were visualized by enhanced chemiluminescence on Kodak X-OMAT film. M= Magic Mark.



SDS-PAGE analysis of ADI-905-629: Lane 1: MW Marker, Lane 2 and Lane 3: 2µg of Osteopontin monoclonal antibody (53), resolved under reduced and non-reduced condition.



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded breast cancer tissue stained with 2µg/ml anti-OPN 53.

## Handling & Storage

**Handling** Avoid freeze/thaw cycles.

**Long Term Storage** -20°C

**Shipping** Blue Ice

**Regulatory Status** RUO - Research Use Only

## Product Details

**Alternative Name** OPN, SPP1, Secreted phosphoprotein 1, Bone sialoprotein 1

**Application** ELISA, IHC (FS), IHC (PS), WB

**Clone** 53

**Formulation** Liquid. In PBS containing 0.1% sodium azide.

**Host** Mouse

**Immunogen** Recombinant human Osteopontin.

**Isotype** IgG2a

**Purity Detail** Protein G affinity purified.

**Source** Purified from ascites.

**Species Reactivity** Human

**UniProt ID** P10451

**Worry-free Guarantee** This antibody is covered by our [Worry-Free Guarantee](#).



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