

# Osteoglycin (H-70): sc-67169

## BACKGROUND

The small leucine-rich proteoglycan (SLRP) family of proteins contains various proteins such as Decorin, Biglycan, Fibromodulin, Keratocan, Lumican, Osteoadherin and Osteoglycin. These proteins all have similar functions as they all mediate extracellular matrix organization and act as binding partners of TGF $\beta$ . Osteoglycin, which also may be designated osteoinductive factor (OIF), is a secreted protein detected in bone tissues. Osteoglycin induces the formation of bone in conjunction with either TGF $\beta$ 1 or TGF $\beta$ 2. The precursor form of the OGN gene product, designated Mimecan, is subject to *in situ* proteolytic cleavage to yield the mature Osteoglycin.

## REFERENCES

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4. Tasheva, E.S., Klocke, B. and Conrad, G.W. 2004. Analysis of transcriptional regulation of the small leucine rich proteoglycans. *Mol. Vis.* 10: 758-772.
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## CHROMOSOMAL LOCATION

Genetic locus: OGN (human) mapping to 9q22.31.

## SOURCE

Osteoglycin (H-70) is a rabbit polyclonal antibody raised against amino acids 21-90 mapping near the N-terminus of Osteoglycin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Osteoglycin (H-70) is recommended for detection of Osteoglycin and Osteoglycin precursor (Mimecan) of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 Osteoglycin siRNA (h): sc-61267, Osteoglycin shRNA Plasmid (h): sc-61267-SH and Osteoglycin shRNA (h) Lentiviral Particles: sc-61267-V.

Molecular Weight of Osteoglycin precursor (Mimecan): 34 kDa.

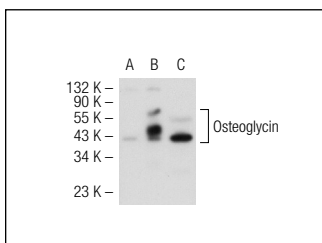
Molecular Weight of mature/glycosylated Osteoglycin: 12-25 kDa.

Positive Controls: Osteoglycin (h4): 293T Lysate: sc-170582, Y79 cell lysate: sc-2240 or HeLa whole cell lysate: sc-2200.

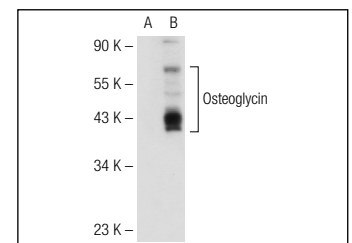
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Osteoglycin (H-70): sc-67169. Western blot analysis of Osteoglycin expression in non-transfected 293T: sc-117752 (A), human Osteoglycin transfected 293T: sc-170582 (B) and Y79 (C) whole cell lysates.



Osteoglycin (H-70): sc-67169. Western blot analysis of Osteoglycin expression in non-transfected: sc-110760 (A) and human Osteoglycin transfected: sc-129364 (B) 293 whole cell lysates.

## RESEARCH USE

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

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