# Osteoglycin (N-16): sc-47279



The Power to Question

# **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 TFG $\beta$ 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.

# CHROMOSOMAL LOCATION

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

### **SOURCE**

Osteoglycin (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Osteoglycin of human origin.

## **PRODUCT**

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

Blocking peptide available for competition studies, sc-47279 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **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.

# **APPLICATIONS**

Osteoglycin (N-16) 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).

Osteoglycin (N-16) is also recommended for detection of mature Osteoglycin and Mimecan precursor in additional species, including equine and bovine.

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.

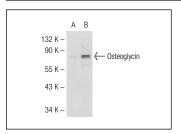
Molecular Weight of mature/glycosylated Osteoglycin: 12-25 kDa.

Positive Controls: Osteoglycin (h): 293T Lysate: sc-129364 or Y79 cell lysate: sc-2240.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **DATA**



Osteoglycin (N-16): sc-47279. 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.



Try Osteoglycin (G-1): sc-374463 or Osteoglycin (E-9): sc-365228, our highly recommended monoclonal aternatives to Osteoglycin (N-16).

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