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 TGFβ. 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 TGFβ1 or TGFβ2. The precursor form of the OGN gene product, designated Mimecan, is subject to in situ proteolytic cleavage to yield the mature Osteoglycin.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: OGN (human) mapping to 9q22.31; Ogn (mouse) mapping to 13 A5.

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

SOURCE
Osteoglycin (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Osteoglycin of human origin.

PRODUCT
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-47277 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
Osteoglycin (K-14) is recommended for detection of Osteoglycin and Osteoglycin precursor (Mimecan) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 siRNA (m): sc-61268, Osteoglycin shRNA Plasmid (h): sc-61267-SH, Osteoglycin shRNA Plasmid (m): sc-61268-SH, Osteoglycin shRNA (h) Lentiviral Particles: sc-61267-V and Osteoglycin shRNA (m) Lentiviral Particles: sc-61268-V.

Molecular Weight of Osteoglycin precursor (Mimecan): 34 kDa.
Molecular Weight of mature/glycosylated Osteoglycin: 12-25 kDa.

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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2782 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

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

PROTOCOLS
See our web site at www.scbt.com or our catalog for detailed protocols and support products.