

Musclin (Q-13): sc-49831

BACKGROUND

Musclin, also designated osteocrin (ostn), shows no homology with any known genes, except that it contains two conserved sequence motifs homologous to the natriuretic peptide family. Musclin is highly expressed in cells of osteoblast lineage and in skeletal muscle tissue, where it is tightly regulated by nutritional changes. It is secreted as either a full-length precursor protein or a processed form. A novel skeletal muscle-derived secretory factor, Musclin may play a role in bone formation and be linked to glucose metabolism. Studies indicate that Insulin increases Musclin expression, whereas epinephrine, isoproterenol and forskolin reduce its expression. Musclin is expressed in osteoblasts and young osteocytes. In mouse tissues, expression is bone-specific, although minimal Musclin expression is also observed in muscle, kidney, testis and heart tissues.

CHROMOSOMAL LOCATION

Genetic locus: OSTN (human) mapping to 3q28.

SOURCE

Musclin (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Musclin 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-49831 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-49831 P, (100 µg 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.

APPLICATIONS

Musclin (Q-13) is recommended for detection of Musclin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Musclin (Q-13) is also recommended for detection of Musclin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Musclin siRNA (h): sc-61106, Musclin shRNA Plasmid (h): sc-61106-SH and Musclin shRNA (h) Lentiviral Particles: sc-61106-V.

Musclin (Q-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

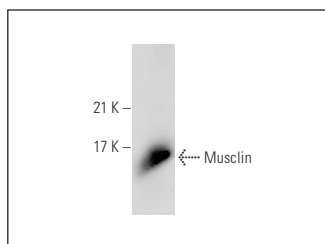
Molecular Weight of Musclin: 17 kDa.

Positive Controls: human bone marrow extract: sc-363752.

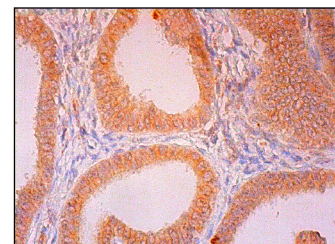
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Musclin (Q-13): sc-49831. Western blot analysis of Musclin expression in human bone marrow tissue extract.



Musclin (Q-13): sc-49831. Immunoperoxidase staining of formalin fixed, paraffin-embedded human premenopausal uterus tissue showing cytoplasmic staining of glandular cells and cells in endometrial stroma.

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.

MONOS
Satisfaction
Guaranteed

Try **Musclin (D-7): sc-365631**, our highly recommended monoclonal alternative to Musclin (Q-13).