UCMA (Unique cartilage matrix-associated protein) is a 138 amino acid secreted protein that is highly expressed in resting chondrocytes in developing long bones and is thought to function in the early phase of chondrocyte differentiation. A furin-like protease processes UCMA into an N-terminal 37 amino acid peptide and a C-terminal 74 amino acid peptide, which is referred to as Unique cartilage matrix-associated protein C-terminal fragment (Ucma-C). Introduction of recombinant Ucma-C interferes with osteogenic differentiation of mesenchymal stem cells, MC3T3-E1 preosteoblasts and primary osteoblasts. This suggests that Ucma may be involved in the negative regulation of osteogenic differentiation of osteochondrogenic precursor cells at the cartilage-bone interface and in peripheral zones of fetal cartilage.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: UCMA (human) mapping to 10p13; Ucma (mouse) mapping to 2 A1.

SOURCE
UCMA (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UCMA 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-163779 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
UCMA (S-14) is recommended for detection of UCMA 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); non cross-reactive with other C10orf family members.

Suitable for use as control antibody for UCMA siRNA (h): sc-90398, UCMA siRNA (m): sc-154887, UCMA shRNA Plasmid (h): sc-90398-SH, UCMA shRNA Plasmid (m): sc-154887-SH, UCMA shRNA (h) Lentiviral Particles: sc-90398-V and UCMA shRNA (m) Lentiviral Particles: sc-154887-V.

Molecular Weight of UCMA: 17 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-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 UCMA (H-2): sc-515468, our highly recommended monoclonal alternative to UCMA (S-14).