

UCMA Antibody

Catalog # ASC10919

Product Information

Application	WB, E
Primary Accession	Q8WVF2
Other Accession	NP_660357 , 50400088
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	16563
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	UCMA antibody can be used for detection of UCMA by Western blot at 2.5 - 5 μ g/mL.

Additional Information

Gene ID	221044
Other Names	Unique cartilage matrix-associated protein, Unique cartilage matrix-associated protein C-terminal fragment, Ucma-C, Gla-rich protein, GRP, UCMA, C10orf49
Target/Specificity	UCMA;
Reconstitution & Storage	UCMA antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	UCMA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	UCMA
Synonyms	C10orf49
Function	May be involved in the negative control of osteogenic differentiation of osteochondrogenic precursor cells in peripheral zones of fetal cartilage and at the cartilage-bone interface.
Cellular Location	Secreted, extracellular space, extracellular matrix
Tissue Location	Predominantly expressed in resting chondrocytes.

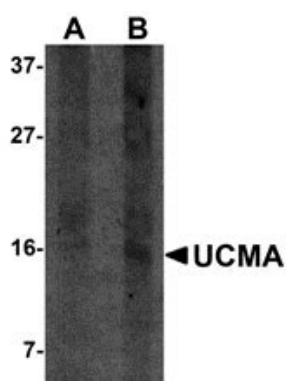
Background

UCMA Antibody: UCMA is a secreted cartilage-specific protein that was discovered in a screen for differentially expressed genes in retinoic acid-treated mouse chondrocytes. It was also identified in a human chondrocyte EST screen for candidate genes of skeletal dysplasias. UCMA expression is thought to parallel that of collagen II with its expression decreasing with maturation chondrocytes mature. UCMA is processed by a furin-like protease into two fragments, an amino-terminal fragment and a carboxy-terminal fragment (UCMA-C). Application of recombinant UCMA-C to primary osteoblasts, mesenchymal stem cells, and MC3T3-E1 pre-osteoblasts interferes with their osteogenic differentiation, but does not affect expression of chondrocyte-specific genes or chondrocyte proliferation, suggesting that UCMA may be involved in the negative control of osteogenic differentiation of osteochondrogenic precursor cells. At least two isoforms of UCMA are known to exist.

References

Surmann-Schmitt C, Dietz U, Kireva T, et al. Ucma, a novel secreted cartilage-specific protein with implications in osteogenesis. *J. Biol. Chem.*2008; 283:7082-93.
Tagariello A, Luther J, Streiter M, et al. Ucma - a novel secreted factor represents a highly specific marker for distal chondrocytes. *Matrix Biol.*2008; 27:3-11.

Images



Western blot analysis of UCMA in SW1353 cell lysate with UCMA antibody at (A) 2.5 and (B) 5 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.