

UCMA Antibody

Catalog # ASC10919

Specification

UCMA Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, E <u>Q8WVF2</u> <u>NP_660357</u>, <u>221044</u> Human, Mouse Rabbit Polyclonal IgG UCMA antibody can be used for detection of UCMA by Western blot at 2.5 - 5 µg/mL.

UCMA Antibody - Additional Information

Gene ID 221044 Target/Specificity UCMA antibody was raised against a 16 amino acid synthetic peptide near the carboxy terminus of human UCMA.

The immunogen is located within the last 50 amino acids of 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.

UCMA Antibody - 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.



UCMA Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

UCMA Antibody - Images



Immunofluorescence of HES5 in mouse brain tissue with HES5 Antibodyat 20 µg/mL.

UCMA Antibody - 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 chrondrocytes 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.

UCMA Antibody - 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 noel secreted factor represents a highly specific

Tagariello A, Luther J, Streiter M, et al. Ucma - a noel secreted factor represents a highly specific marker for distal chondrocytes. Matrix Biol.2008; 27:3-11.

