

Rabbit Anti-UCMA antibody

SL12378R

Product Name:	UCMA
Chinese Name:	软骨基质相关蛋白UCMA抗体
Alias:	C10orf49; Gla rich protein; Gla-rich protein; Grp; GRP; OTTMUSP00000011599; RP23-272I15.1; UCMA; Ucma-C; UCMA_HUMAN; Unique cartilage matrix associated protein; Unique cartilage matrix-associated protein C-terminal fragment; Upper zone of growth plate and cartilage matrix associated.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Cellular localization:	Extracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human UCMA:21-120/138
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	UCMA is a 138 amino acid secreted protein that is highly expressed in resting chrondrocytes in developing long bones and is thought to function in the early phase of chrondrocyte 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.

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.

Subcellular Location:

Secreted > extracellular space > extracellular matrix.

Tissue Specificity:

Predominantly expressed in resting chondrocytes.

Post-translational modifications:

Proteolytically cleaved by a furin-like convertase to generate a persistent C-terminal fragment found in almost the entire cartilage matrix, and affecting osteoblast differentiation.

Sulfated on tyrosine residues.

Similarity:

Belongs to the UCMA family.

SWISS:

Q8WVF2

Gene ID:

221044

Database links:

UniProtKB/Swiss-Prot: Q8WVF2.2

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.