

## Rabbit Anti-UCMA/PE Conjugated antibody

SL12378R-PE

<b>Product Name</b>	Anti-UCMA/PE
<b>Chinese Name</b>	PE 标记的软骨基质相关蛋白 UCMA 抗体
<b>Alias</b>	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.
<b>Research Area</b>	Cell biology Developmental biology Stem cells
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Rat(predicted:Human,Mouse) IF=1:100-500
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	14kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human UCMA
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Product Detail</b>	<b>background:</b> UCMA 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.

**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.

**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.