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COMP Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP6906c

Specification

COMP Antibody (Center) Blocking Peptide - Product Information

Primary Accession P49747

COMP Antibody (Center) Blocking Peptide - Additional Information

Gene ID 1311

Other Names
Cartilage oligomeric matrix protein, COMP, Thrombospondin-5, TSP5, COMP

Target/Specificity
The synthetic peptide sequence used to generate the antibody <a >AP6906c was selected from the Center region of human COMP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

COMP Antibody (Center) Blocking Peptide - Protein Information

Name COMP (HGNC:2227)

Function
Plays a role in the structural integrity of cartilage via its interaction with other extracellular matrix proteins such as the collagens and fibronectin. Can mediate the interaction of chondrocytes with the cartilage extracellular matrix through interaction with cell surface integrin receptors (PubMed:16542502, PubMed:16051604). Could play a role in the pathogenesis of osteoarthritis (PubMed:16542502). Potent suppressor of apoptosis in both primary chondrocytes and transformed cells. Suppresses apoptosis by blocking the activation of caspase-3 and by inducing the IAP family of survival proteins (BIRC3, BIRC2, BIRC5 and XIAP) (PubMed:17993464). Essential for maintaining a vascular smooth muscle cells (VSMCs) contractile/differentiated phenotype under physiological and pathological stimuli. Maintains this phenotype of VSMCs by interacting with ITGA7 (By similarity).

Cellular Location
Secreted, extracellular space, extracellular matrix

Tissue Location
Abundantly expressed in the chondrocyte extracellular matrix, and is also found in bone, tendon, ligament and synovium and blood vessels. Increased amounts are produced during late stages of osteoarthritis in the area adjacent to the main defect

COMP Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

COMP Antibody (Center) Blocking Peptide - Images

COMP Antibody (Center) Blocking Peptide - Background

COMP is a noncollagenous extracellular matrix (ECM) protein. It consists of five identical glycoprotein subunits, each with EGF-like and calcium-binding (thrombospondin-like) domains. Oligomerization results from formation of a five-stranded coiled coil and disulfides. Binding to other ECM proteins such as collagen appears to depend on divalent cations.

COMP Antibody (Center) Blocking Peptide - References

Kim,H.J., et.al., Eur. J. Appl. Physiol. 105 (5), 765-770 (2009)