

**ASPN Antibody (Center) Blocking Peptide**

Synthetic peptide  
Catalog # BP6604c

**Specification**

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**ASPN Antibody (Center) Blocking Peptide - Product Information**

Primary Accession [O9BXN1](#)

**ASPN Antibody (Center) Blocking Peptide - Additional Information**

Gene ID 54829

**Other Names**

Asporin, Periodontal ligament-associated protein 1, PLAP-1, ASPN, PLAP1, SLRR1C

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP6604c](/products/AP6604c) was selected from the Center region of human ASPN. 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.

**ASPN Antibody (Center) Blocking Peptide - Protein Information**

Name ASPN

Synonyms PLAP1, SLRR1C

**Function**

Negatively regulates periodontal ligament (PDL) differentiation and mineralization to ensure that the PDL is not ossified and to maintain homeostasis of the tooth-supporting system. Inhibits BMP2-induced cytodifferentiation of PDL cells by preventing its binding to BMPRII/BMP type-II receptor, resulting in inhibition of BMP-dependent activation of SMAD proteins (By similarity). Critical regulator of TGF-beta in articular cartilage and plays an essential role in cartilage homeostasis and osteoarthritis (OA) pathogenesis. Negatively regulates chondrogenesis in the articular cartilage by blocking the TGF-beta/receptor interaction on the cell surface and inhibiting the canonical TGF-beta/Smad signal. Binds calcium and plays a role in osteoblast-driven collagen biomineralization activity.

**Cellular Location**

Secreted, extracellular space, extracellular matrix

**Tissue Location**

Higher levels in osteoarthritic articular cartilage, aorta, uterus. Moderate expression in small intestine, heart, liver, bladder, ovary, stomach, and in the adrenal, thyroid, and mammary glands. Low expression in trachea, bone marrow, and lung Colocalizes with TGFB1 in chondrocytes within osteoarthritic (OA) lesions of articular cartilage.

**ASPN Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ASPN Antibody (Center) Blocking Peptide - Images****ASPN Antibody (Center) Blocking Peptide - Background**

ASPN belongs to a family of leucine-rich repeat (LRR) proteins associated with the cartilage matrix. The name asporin reflects the unique aspartate-rich N terminus and the overall similarity to decorin.

**ASPN Antibody (Center) Blocking Peptide - References**

Gruber,H.E., Arthritis Res. Ther. 11 (2), R47 (2009)Ikegawa,S., Curr. Med. Chem. 15 (7), 724-728 (2008)