

### **COL9A1** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2762c

#### Specification

## **COL9A1 Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>P20849</u> <u>005722</u> Human, Mouse, Rat Mouse Rabbit Polyclonal Rabbit IgG 91869 428-456

#### **COL9A1** Antibody (Center) - Additional Information

Gene ID 1297

Other Names Collagen alpha-1(IX) chain, COL9A1

**Target/Specificity** This COL9A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 428-456 amino acids from the Central region of human COL9A1.

**Dilution** WB~~1:1000 IHC-P~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

COL9A1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **COL9A1** Antibody (Center) - Protein Information

Name COL9A1



Function Structural component of hyaline cartilage and vitreous of the eye.

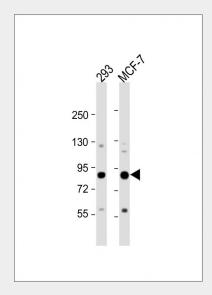
**Cellular Location** Secreted, extracellular space, extracellular matrix

### **COL9A1 Antibody (Center) - Protocols**

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

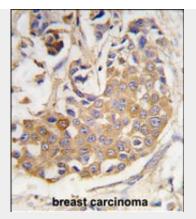
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **COL9A1 Antibody (Center) - Images**



All lanes : Anti-COL9A1 Antibody (Center) at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 92 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with COL9A1 antibody (Center) (Cat.#AP2762c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## COL9A1 Antibody (Center) - Background

COL9A1 is one of the three alpha chains of type IX collagen, which is a minor (5-20%) collagen component of hyaline cartilage. Type IX collagen is usually found in tissues containing type II collagen, a fibrillar collagen. Studies in knockout mice have shown that synthesis of the alpha 1 chain is essential for assembly of type IX collagen molecules, a heterotrimeric molecule, and that lack of type IX collagen is associated with early onset osteoarthritis. Mutations in the COL9A1 gene are associated with osteoarthritis in humans, with multiple epiphyseal dysplasia, 6, a form of chondrodysplasia, and with Stickler syndrome, a disease characterized by ophthalmic, orofacial, articular, and auditory defects.

## **COL9A1 Antibody (Center) - References**

Fresquet,M., J. Biol. Chem. 282 (48), 34634-34643 (2007) Liu,L.Y., Yi Chuan 29 (4), 427-432 (2007) Van Camp,G., Am. J. Hum. Genet. 79 (3), 449-457 (2006) Sivakumaran,T.A., J. Assoc. Res. Otolaryngol. 7 (2), 160-172 (2006)