

Collagen IX Rabbit pAb

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Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession P20849 Reactivity Mouse Host Rabbit Clonality Polyclonal Calculated MW 91869 **Physical State** Liquid

Immunogen KLH conjugated synthetic peptide derived from human Collagen IX

801-921/921 **Epitope Specificity**

Isotype IgG

Purity affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

SIMILARITY

SUBUNIT

Post-translational modifications

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Secreted, extracellular space, extracellular matrix (By similarity).

Belongs to the fibril-associated collagens with interrupted helices (FACIT) family. Contains 10 collagen-like domains. Contains 1 laminin G-like domain. Heterotrimer of an alpha 1(IX), an alpha 2(IX) and an alpha 3(IX) chain. Covalently linked to the telopeptides of type II collagen by lysine-derived cross-links. Prolines at the third position of the tripeptide repeating unit

(G-X-Y) are hydroxylated in some or all of the chains.

DISEASE Multiple epiphyseal dysplasia 6 (EDM6) [MIM:614135]: A generalized skeletal

dysplasia associated with significant morbidity. Joint pain, joint deformity, waddling gait, and short stature are the main clinical signs and symptoms.

Radiological examination of the skeleton shows delayed, irregular

mineralization of the epiphyseal ossification centers and of the centers of the carpal and tarsal bones. Multiple epiphyseal dysplasia is broadly categorized into the more severe Fairbank and the milder Ribbing types. The Fairbank type is characterized by shortness of stature, short and stubby fingers, small epiphyses in several joints, including the knee, ankle, hand, and hip. The Ribbing type is confined predominantly to the hip joints and is characterized by hands that are normal and stature that is normal or near-normal.

Note=The disease is caused by mutations affecting the gene represented in

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Type IX collagen proteoglycan is a major component of hyaline cartilages **Background Descriptions**

> where it is located on the surface of the collagen fibrils so that a collagenous domain of the molecule (called COL 3) and a non-collagenous domain (called NC4) project at periodic distances away from the surface of the fibrils.

Additional Information

Gene ID 1297

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

Target/Specificity Cytoplasmic

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500

0-10000

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name COL9A1

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

Cellular Location Secreted, extracellular space, extracellular matrix

Background

Type IX collagen proteoglycan is a major component of hyaline cartilages where it is located on the surface of the collagen fibrils so that a collagenous domain of the molecule (called COL 3) and a non-collagenous domain (called NC4) project at periodic distances away from the surface of the fibrils.

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