ARG22512
anti-COMP antibody [MA37C94 (HC484D1)]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rat Monoclonal antibody [MA37C94 (HC484D1)] recognizes COMP This antibody recognizes human cartilage oligomeric matrix protein (COMP), otherwise known as thrombospondin-5 (TSP-5). COMP is a 757 amino acid matrix glycoprotein bearing four EGF-like domains, a single TSP C-terminal domain and eight TSP type-3 repeats (Uniprot P49747). Defects in the COMP gene can lead to the presence of pseudoachondroplasia or multiple epiphyseal dysplasia (Posey et al. 2014). Rat anti Human cartilage oligomeric matrix protein, clone MA37C94 recognizes an epitope located in the central portion of the molecule and has been described as suitable for use in western blotting (Gagarina et al. 2008) and immunohistochemistry (Grigoriadis et al. 2006
Tested Reactivity	Hu
Tested Application	ELISA, IHC-Fr, IHC-P, IP, WB
Host	Rat
Clonality	Monoclonal
Clone	MA37C94 (HC484D1)
Isotype	IgG2a
Target Name	COMP
Species	Human
Immunogen	Human cartilage derived COMP
Conjugation	Un-conjugated
Alternate Names	MED; TSP5; Thrombospondin-5; COMP; THBS5; EDM1; PSACH; EPD1; Cartilage oligomeric matrix protein

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
IHC-Fr	Assay-dependent
IHC-P	Assay-dependent
IP	Assay-dependent
WB	1:200 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

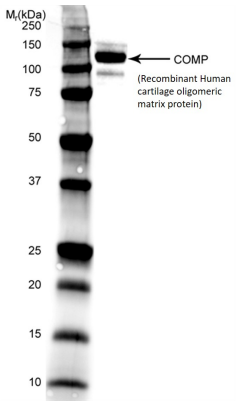
Form	Liquid
Purification	Purification with Protein G.

Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	COMP
Gene Full Name	cartilage oligomeric matrix protein
Background	The protein encoded by this gene 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. Mutations can cause the osteochondrodysplasias pseudochondroplasia (PSACH) and multiple epiphyseal dysplasia (MED). [provided by RefSeq, Jul 2008]
Function	May play 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. Could play a role in the pathogenesis of osteoarthritis. 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). 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). [UniProt]
Calculated Mw	83 kDa

Images



ARG22512 anti-COMP antibody [MA37C94 (HC484D1)] WB image

Western blot: Recombinant Human cartilage oligomeric matrix protein stained with ARG22512 anti-COMP antibody [MA37C94 (HC484D1)].