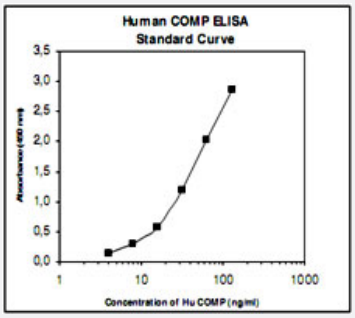
COMP (Human) ELISA Kit

Catalog # KA0021 Size 1 Kit

Applications



The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

Specification

Product Description	COMP (Human) ELISA Kit is a double monoclonal sandwich enzyme immunoassay for the quantitative measurement of human COMP in serum or plasma.
Suitable Sample	Plasma (Citrate, EDTA, Heparin), Serum
Sample Volume	100 uL
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	4 to 128 ng/mL
Limit of Detection	0.4 ng/mL
Reactivity	Human
Regulation Status	For research use only (RUO)
Quality Control Testing	Standard curve The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

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Storage Instruction	Store the kit at 4°C.

Applications

- Quantification

Gene Info — COMP

Entrez GeneID	1311
Gene Name	COMP
Gene Alias	EDM1, EPD1, MED, MGC131819, MGC149768, PSACH, THBS5
Gene Description	cartilage oligomeric matrix protein
Omim ID	132400 177170 600310
Gene Ontology	Hyperlink
Gene Summary	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
Other Designations	cartilage oligomeric matrix protein (pseudoachondroplasia, epiphyseal dysplasia 1, multiple)|cartilage oligomeric matrix protein(pseudoachondroplasia, epiphyseal dysplasia 1, multiple)|pseudoachondroplasia (epiphyseal dysplasia 1, multiple)|thrombospondin

Publication Reference

- An exploratory study to investigate the association between age, physical activity, femoral trochlear cartilage thickness and biomarkers of tissue metabolism in adult males.

  Harry M Roberts, Claire L Griffith-McGeever, Julian A Owen, Lewis Angell, Jonathan P Moore, Jeanette M Thom.

  European Journal of Applied Physiology 2021 Jul; 121(7):1871.

  Application: Quant, Human, Human serum

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- The effect of aerobic walking and lower body resistance exercise on serum COMP and hyaluronan, in both males and females.

  Roberts HM, Moore JP, Thom JM.

  European Journal of Applied Physiology 2018 Jun; 118(6):1095.

  Application: ELISA, Human, Serum

- Cartilage turnover and intra-articular corticosteroid injections in knee osteoarthritis.

  Klocke R, Levasseur K, Kitas GD, Smith JP, Hirsch G.

  Rheumatology International 2018 Feb; 38:455.

  Application: ELISA, Human, urinary, serum biomarkers

- Cartilage oligomeric protein, matrix metalloproteinase-3, and Coll2-1 as serum biomarkers in knee osteoarthritis: a cross-sectional study.

  Georgiev T, Ivanova M, Kopchev A, Velikova T, Miloshov A, Kurteva E, Yuzeir K, Penkov M, Kabakchieva P, Rashkov R, Stoilov R.

  Rheumatology International 2017 Nov; [Epub].

  Application: Quant, Human, Serum from patients with primary knee osteoarthritis

- The effect of vigorous running and cycling on serum COMP, lubricin, and femoral cartilage thickness: a pilot study.

  Roberts HM, Moore JP, Griffith-McGeever CL, Fortes MB, Thom JM.

  European Journal of Applied Physiology 2016 Jun; 116(8):1467.

  Application: Quan, Human, Human serum

- The Effects of Aerobic and Resistance Exercise on Markers of Large Joint Health in Stable Rheumatoid Arthritis Patients: A Pilot Study.

  Rebecca-Jane Law, Zoe L Saynor, Julia Gabbitas, Jeremy Jones, Alexandra Kraus, Anne Breslin, Peter J Maddison, Jeanette M Thom

  Musculoskeletal Care 2015 Dec; 13(4):222-35.

- Australian Rheumatology Associationin conjunction with Rheumatology Health Professionals Association, 56th Annual Scientific Meeting, Adelaide, South Australia, 23-26 May 2015.

  N/A

  Intern Med J 2015 May; 45 Suppl 2:1-46.

Pathway

- ECM-receptor interaction

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- Focal adhesion
- TGF-beta signaling pathway

Disease

- Alzheimer disease
- Cardiovascular Diseases
- Diabetes Complications
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Metabolic Syndrome X
- Neoplasms
- Osteoarthritis
- Osteochondrodysplasias
- Osteoporosis

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