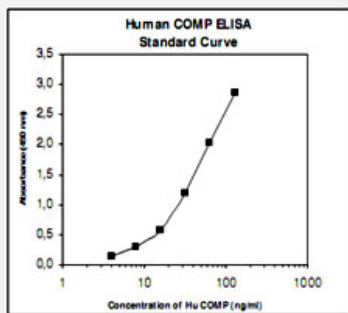


# COMP (Human) ELISA Kit

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

|                                |                                                                                                                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>     | COMP (Human) ELISA Kit is a double monoclonal sandwich enzyme immunoassay for the quantitative measurement of human COMP in serum or plasma.                                                      |
| <b>Suitable Sample</b>         | Plasma (Citrate, EDTA, Heparin), Serum                                                                                                                                                            |
| <b>Sample Volume</b>           | 100 $\mu$ L                                                                                                                                                                                       |
| <b>Label</b>                   | HRP-conjugated                                                                                                                                                                                    |
| <b>Detection Method</b>        | Colorimetric                                                                                                                                                                                      |
| <b>Assay Type</b>              | Quantitative                                                                                                                                                                                      |
| <b>Calibration Range</b>       | 4 to 128 ng/mL                                                                                                                                                                                    |
| <b>Limit of Detection</b>      | 0.4 ng/mL                                                                                                                                                                                         |
| <b>Reactivity</b>              | Human                                                                                                                                                                                             |
| <b>Regulation Status</b>       | For research use only (RUO)                                                                                                                                                                       |
| <b>Quality Control Testing</b> | Standard curve<br>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. |

## Storage Instruction

Store the kit at 4°C.

## Applications

- Quantification

## Gene Info — COMP

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID      | <a href="#">1311</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Gene Name          | COMP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Gene Alias         | EDM1, EPD1, MED, MGC131819, MGC149768, PSACH, THBS5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gene Description   | cartilage oligomeric matrix protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Omim ID            | <a href="#">132400</a> <a href="#">177170</a> <a href="#">600310</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 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 disulfide bonds. Binding to other ECM proteins such as collagen appears to depend on divalent cations. Mutations can cause the osteochondrodysplasias pseudoachondroplasia (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

- [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, Miloshev 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: Quant, Human, Human serum

## Pathway

- [ECM-receptor interaction](#)
- [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](#)