

## DESCRIPTION

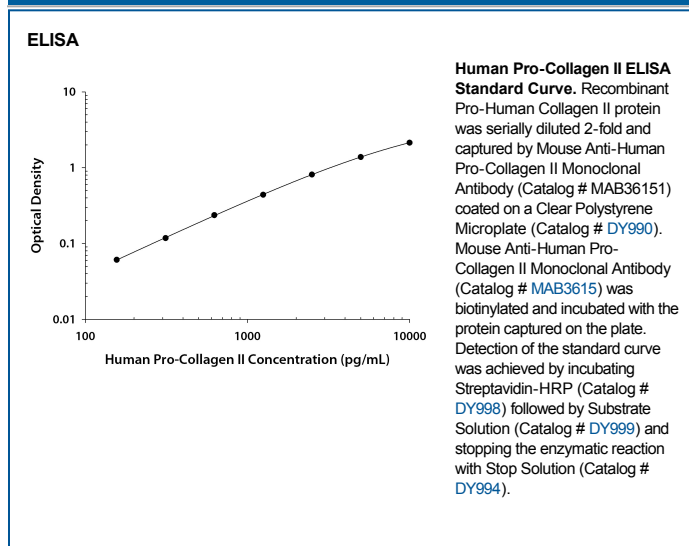
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Pro-Collagen II in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 819447
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human Pro-Collagen II Gln26-Arg266 and Gly957-Leu1487 Accession # P02458
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

<b>ELISA</b>	This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Human Pro-Collagen II Monoclonal Antibody (Catalog # <a href="#">MAB3615</a> ).  <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human Pro-Collagen II DuoSet ELISA Kit (Catalog # <a href="#">DY7589-05</a>) for convenient development of a sandwich ELISA.</i>
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## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Type II collagen is an essential component of cartilage. It is essential for skeletal development and for the ability of cartilage to resist compressive forces. Type II collagen is a homotrimer of  $\alpha 1(\text{II})$  chains. Defects in Type II collagen are the cause of numerous diseases, including chondrodysplasias and arthritis (1). This recombinant mini pro- $\alpha 1(\text{II})$  collagen consists of the N-terminal propeptide, 108 Gly-X-Y repeats, and the C-terminal propeptide. Proteolytic processing of the C-terminal propeptide by the procollagen C-proteinase (BMP-1) releases chondrocalcin, a calcium binding protein.

### References:

1. Kuivaniemi H. *et al.* (1997) Hum. Mutat. 9:300.