

## Product datasheet for **AP06068PU-M**

### Collagen II (COL2A1) Rabbit Polyclonal Antibody

#### Product data:

|                         |   |
|-------------------------|---|
| Product Type:           | Primary Antibodies  |
| Applications:           | IF, IHC, WB   |
| Recommended Dilution:   | <b>Western blot:</b> 1/500-1/1000.<br><b>Immunohistochemistry on Paraffin sections:</b> 1/50-1/200.<br><b>Immunofluorescence:</b> 1/50-1/200.                   |
| Reactivity:             | Human, Mouse, Rat   |
| Host:                   | Rabbit  |
| Clonality:              | Polyclonal  |
| Immunogen:              | Synthetic peptide, corresponding to amino acids 101-150 of Human COL2A1.  |
| Specificity:            | This antibody detects endogenous levels of Collagen type II alpha 1 chain protein (region surrounding Pro133).  |
| Formulation:            | Phosphate buffered saline (PBS), pH 7.2.<br>State: Aff - Purified<br>State: Liquid purified Ig fraction (> 95% by SDS-PAGE)<br>Preservative: 0.05% Sodium azide |
| Concentration:          | 1.0 mg/ml   |
| Purification:           | Affinity Chromatography using epitope-specific immunogen  |
| Conjugation:            | Unconjugated  |
| Storage:                | Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.<br>Avoid repeated freezing and thawing.  |
| Stability:              | Shelf life: one year from despatch.   |
| Predicted Protein Size: | ~ 140 kDa   |
| Gene Name:              | collagen type II alpha 1 chain  |
| Database Link:          | <a href="#">Entrez Gene 12824 Mouse</a> <a href="#">Entrez Gene 25412 Rat</a> <a href="#">Entrez Gene 1280 Human P02458</a>                                     |



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**Background:**

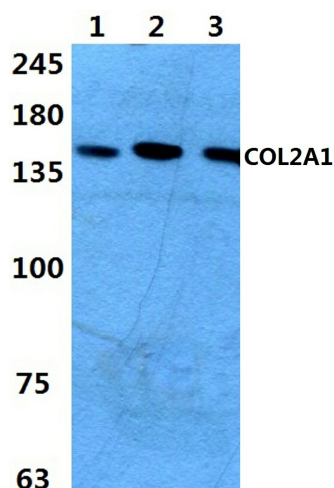
The extensive family of COL gene products (collagens) is composed of several chain types, including fibril-forming interstitial collagens (types I, II, III and V) and basement membrane collagens (type IV), each type containing multiple isoforms. Collagens are fibrous, extracellular matrix proteins with high tensile strength and are the major components of connective tissue, such as tendons and cartilage. All collagens contain a triple helix domain and frequently show lateral self-association in order to form complex connective tissues. Several collagens also play a role in cell adhesion, important for maintaining normal tissue architecture and function. In cartilage, Collagen Type II constitutes the bulk of the fibril. Sensitization with Collagen Type II induces an erosive polyarthritis in rats, mice and higher primates which can resemble rheumatoid arthritis and relapsing polychondritis.

**Synonyms:**

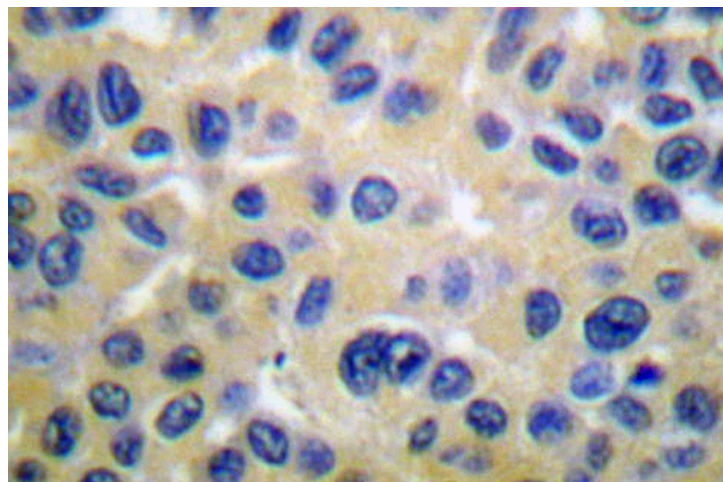
COL2A1, Alpha-1 type II collagen

**Protein Pathways:**

ECM-receptor interaction, Focal adhesion

**Product images:**


Western blot (WB) analysis of COL2A1 antibody at 1/500 dilution Lane 1:Hela whole cell lysate Lane 2:Mouse spleen tissue lysate Lane 3:Rat spleen tissue lysate



Immunohistochemical analysis using Collagen type II alpha 1 chain antibody in paraffin-embedded human breast carcinoma tissue.