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# Anti-Collagen 3 alpha 1 Antibody

Catalog # AP51104

## Product Information

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|---|---|
| **Application** | WB, IHC, IF/IC |
| **Primary Accession** | P02461 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 138564 |

## Additional Information

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| **Gene ID** | 1281 |
| **Other Names** | Collagen alpha-1(III) chain |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Collagen 3 alpha 1. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

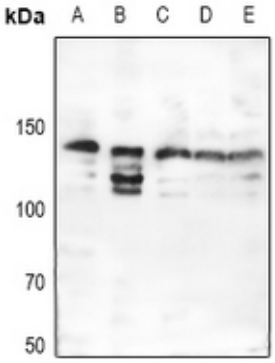
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|---|---|
| **Name** | COL3A1 |
| **Function** | Collagen type III occurs in most soft connective tissues along with type I collagen. Involved in regulation of cortical development. Is the major ligand of ADGRG1 in the developing brain and binding to ADGRG1 inhibits neuronal migration and activates the RhoA pathway by coupling ADGRG1 to GNA13 and possibly GNA12. |
| **Cellular Location** | Secreted, extracellular space, extracellular matrix {ECO:0000255\|PROSITE-ProRule:PRU00793} |

## References

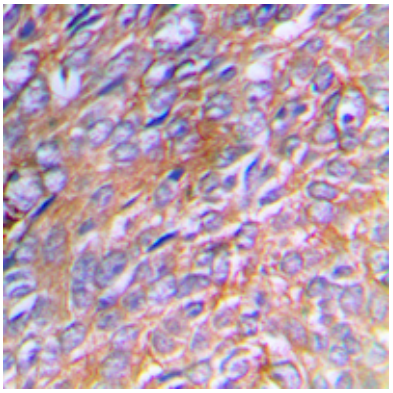
Ala-Kokko L.,et al.Biochem. J. 260:509-516(1989).
Valkkila M.,et al.Matrix Biol. 20:357-366(2001).

Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Benson-Chanda V.,et al.Gene 78:255-265(1989).

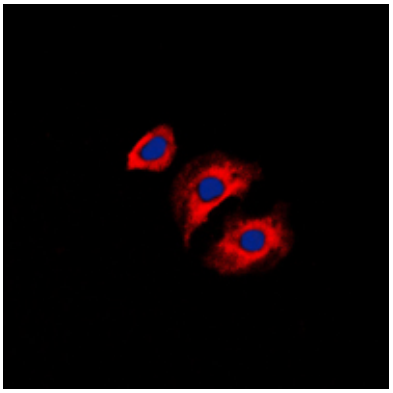
## Images




Western blot analysis of Collagen 3 alpha 1 expression in SGC7901 (A), HEK293T (B), NIHC3T3 (C), H9C2 (D), PC12 (E) whole cell lysates. (Predicted band size: 138 kD; Observed band size: 139 kD)



Immunohistochemical analysis of Collagen 3 alpha 1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Collagen 3 alpha 1 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.