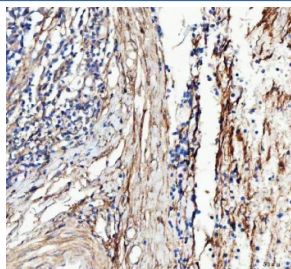


COL3A1 Antibody / Collagen III (RQ4641)

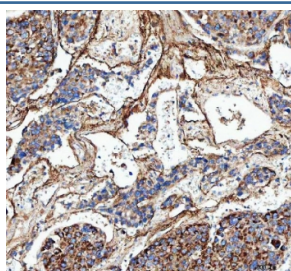
Catalog No.	Formulation	Size
RQ4641	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

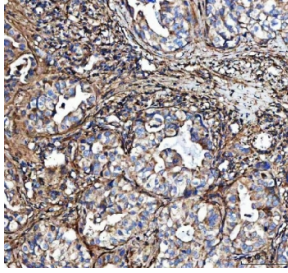
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P02461
Localization	Extracellular
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry (intracellular) : 1-3ug/million cells
Limitations	This COL3A1 antibody is available for research use only.



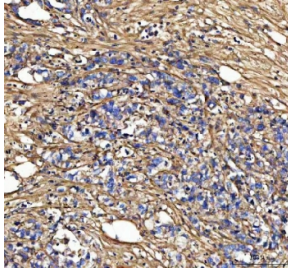
IHC staining of FFPE human tonsil tissue with COL3A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



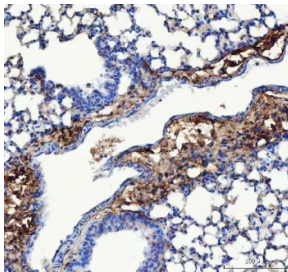
IHC staining of FFPE human liver cancer tissue with COL3A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



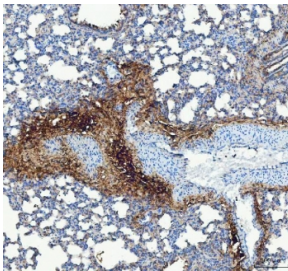
IHC staining of FFPE human lung adenocarcinoma tissue with COL3A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



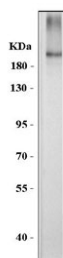
IHC staining of FFPE human gastric poorly differentiated adenocarcinoma tissue with COL3A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



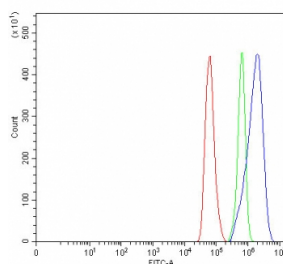
IHC staining of FFPE mouse lung tissue with COL3A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat lung tissue with COL3A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of mouse skin tissue lysate with COL3A1 antibody at 0.5ug/ml. Predicted molecular weight ~139 kDa but may be observed at higher molecular weights due to glycosylation.



Flow cytometry testing of fixed and permeabilized human HeLa cells with COL3A1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= COL3A1 antibody.

Description

COL3A1, also called EDS4A or Collagen alpha-1(III), is a protein that in humans is encoded by the COL3A1 gene. It is mapped to 2q32.2. COL3A1 chain is a fibrillar-forming collagen comprising 3 alpha-1(III) chains and is expressed in early embryos and throughout embryogenesis. In adult, COL3A1 is a major component of the extracellular matrix in a variety of internal organs and skin. COL3A1 is also a fibrous scleroprotein in bone, cartilage, dentin, tendon, bone marrow stroma and other connective tissue. It is involved in regulation of cortical development, and it is the major ligand of GPR56 in the developing brain. COL3A1 binding to GPR56 can inhibit neuronal migration and activate the RhoA pathway by coupling GPR56 to GNA13 and possibly GNA12.

Application Notes

Optimal dilution of the COL3A1 antibody should be determined by the researcher.

Immunogen

Amino acids D1222-E1455 from the human protein were used as the immunogen for the COL3A1 antibody.

Storage

After reconstitution, the COL3A1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.