

Product datasheet for **AP31894PU-N**

Col3a1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC
Recommended Dilution:	Recommended for use in Immunohistochemistry on Frozen Sections and for Immunostaining of cultured rat cells. Suitable for Dot-blotting and ELISA on native Rat Collagen type I. <i>Recommended Dilutions:</i> 1/20 for Immunohistochemical procedures if Peroxidase labeled secondary antibodies are applied or 1/10 if a FITC labeled secondary antibody is used.
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Native Rat Collagen type III. Antibodies to rat collagen type III are raised in rabbits which are numerously immunized with extensively purified native collagen type III extracted from rat tail tendon into dilute acidic buffer after mild pepsin digestion. Pooled antisera are passed over DEAE-cellulose to produce IgG-enriched fraction. Next, the antisera fraction is absorbed with immobilized rat collagen types I to remove cross-reactive antibodies to antigenic determinants common for this type of collagen.
Specificity:	Specificity was ascertained by competition ELISA. Complete inhibition was found if the antibody was preincubated with collagen rat type III. Inhibition by rat collagen type I is observed only at 10-20 times higher concentration. No inhibition was found with fibrinectin, fibrogen and laminin. Characteristic immunostaining pictures of frozen sections of rat kidney and skin are produced to certify absence of crossreactivity with basement membranes.
Formulation:	State: Aff - Purified State: Lyophilized purified IgG fraction
Reconstitution Method:	Restore with 1 ml distilled water and add preservative if preferred.
Concentration:	lot specific
Purification:	Affinity Chromatography: The affinity purified antibody is obtained by binding to immobilized native rat collagen type III (the antigen used for immunization), followed by elution with acidic buffer, neutralisation, dialysis, dispensing and lyophilization.



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Conjugation:	Unconjugated
Gene Name:	collagen, type III, alpha 1
Database Link:	Entrez Gene 84032 Rat P13941
Background:	It is often extremely difficult to generate antibodies with specificities to collagens due to the uninterrupted "Glycine-X-Y" triplet repeat that is a necessary part of the triple helical structure. The development of type specific antibodies is dependent on NON-DENATURED three-dimensional epitopes - this may result in diminished reactivity of some antibodies with denatured collagen or formalin-fixed, paraffin embedded tissues. Anti-Collagen antibodies have been used for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, for immunoprecipitation and for native (non-denaturing, non-dissociating) PAGE and western blotting for highly sensitive qualitative analysis
Synonyms:	COL3A1