
Collagen Type I (5D8) Antibody

Subcategory: Mouse Monoclonal Antibody

Cat. No.: 250274

Unit: 0.2 mg

Description:

Type I collagen is present in connective tissue and bone where it makes up about 90% of the organic matrix. Defects in one or both alleles of the type I collagen gene causes "brittle bone disease" (osteogenesis imperfecta). Patients suffering from such defects have low levels of fully functional type I collagen resulting in fragile bones. This antibody is highly specific for native type I collagen and shows no evidence of cross-reactivity with type II, III, V and VI collagens in inhibition ELISA and immunoblotting, and no evidence of cross-reactivity with other connective tissue proteins (laminin, fibronectin, elastin). The antibody reacts with human, calf, sheep, pig, dog and goat type I collagens in ELISA and immunoblotting, but does not react with mouse, guinea pig, cat, rabbit, squirrel, horse, kangaroo or chicken type I collagen. The antibody has a K_a of approximately $2.5 \times 10^6 \text{ M}^{-1}$ for human type I collagen.

Isotype: Mouse IgG1/k

Applications: E, WB, IHC

Species Reactivity: H

Format: Each vial contains 0.2 mg IgG in 0.2 ml (1 mg/ml) of PBS pH7.4 with 0.09% sodium azide. Antibody was purified by Protein-A/G affinity chromatography.

Alternate Names: Collagen alpha-1(I) chain; alpha-1 type I collagen; COL1A1

Accession No.: P02452

Antigen: Pepsin-solubilized, salt-fractionated type I collagen from human placenta

Application Notes: Product Cat. No. 250274 can be used to detect collagens by ELISA. In immunoblotting Product Cat. No. 250274 detects human type I collagen only in its native triple helix form. Product Cat. No. 250274 can be used in immunohistochemistry with frozen unfixed sections of human and bovine skin. If tissue fixation is required, acetone or ethanol is recommended. E: 1:16,000; WB: 1:1,000; IHC: 1:200

Storage: Store at 4°C. Product is guaranteed 6 months from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.