

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Fibrinogen in direct ELISAs. In Western blots, does not detect Fibrinogen A.
Source	Monoclonal Mouse IgG ₁ Clone # 949332
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human serum-derived Fibrinogen Accession # P02671
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

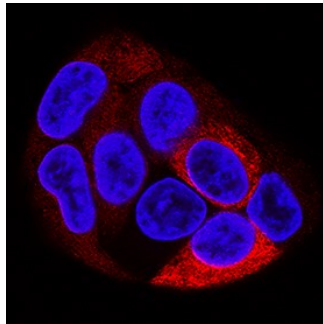
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



Fibrinogen in HepG2 Human Cell Line.
Fibrinogen was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Mouse Anti-Human Fibrinogen Monoclonal Antibody (Catalog # MAB9404) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Fibrinogen is a 340 kDa, secreted glycoprotein complex that is found in blood at concentrations of 150-400 mg/dL. It is secreted primarily by hepatocytes, but is also reported to be expressed by fibroblasts, type I alveolar epithelium, intestinal epithelium and some tumor cells. Fibrinogen is a homodimer that is composed of two, three-polypeptide chain subunits. In human, each subunit contains one 847 amino acid (aa) alpha chain, one 461 aa beta chain, and one 427 aa gamma chain. Multiple interchain disulfide bonds link all three polypeptides. Fibrinogen plays a central role in clot formation. Conversion of fibrinogen to fibrin is triggered by thrombin, which cleaves fibrinopeptides A and B from alpha and beta chains, and thus exposes the N-terminal polymerization sites responsible for the formation of the soft clot. The soft clot is converted into the hard clot by factor XIIIa which catalyzes the epsilon-(gamma-glutamyl)lysine cross-linking between gamma chains (stronger) and between alpha chains (weaker) of different monomers. Fibrinogen is also a component of the ECM and binds to cell surface molecules on inflammatory cells. Mature human alpha, beta and gamma -chains share 67%, 85% and 83% aa identity with mouse alpha, beta and gamma -chains, respectively.