

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human β -Actin in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 937210
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Peptide containing a sequence at the N-terminus of human β -Actin Accession # P60709
Formulation	Lyophilized from a 0.2 μ m 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 μ m filtered solution in PBS.

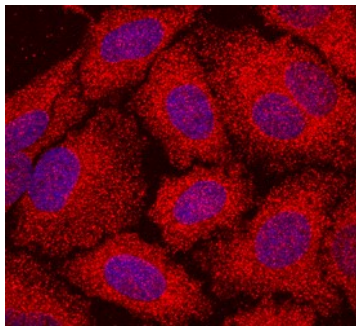
APPLICATIONS

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 μ g/mL	See Below

DATA

Immunocytochemistry



β -Actin in HeLa Human Cell Line.
 β -Actin was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human β -Actin Monoclonal Antibody (Catalog # MAB8969) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; 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

Actin makes up the most abundant protein in many eukaryotic cell types. It polymerizes to form microfilaments that have an array of functions, including regulating contractility, motility, cytokinesis, phagocytosis, adhesion, cell morphology, and providing structural support. At least six types of Actin, falling into three categories, exist in higher eukaryotes. The three types, separated based on isoelectric point, include α (α -Skeletal, α -Cardiac, α -Smooth Muscle), β (β -Non-muscle) and γ (γ -Smooth Muscle, γ -non-muscle) isoforms. Non-muscle β - and γ -actin are also known as cytoplasmic actin.