

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MASTL in direct ELISA.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MASTL. Lys39-Lys158 Accession # Q96GX5
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.

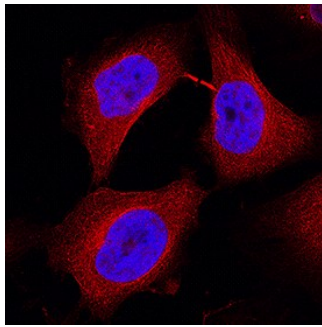
APPLICATIONS

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	5-15 µg/mL	See Below

DATA

Immunocytochemistry



MASTL in HeLa Human Cell Line. MASTL was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Goat Anti-Human MASTL Antigen Affinity-purified Polyclonal Antibody (Catalog # AF10022) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) 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 0.2 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

MASTL is a ubiquitous microtubule associated serine/threonine kinase which plays a key role in mitosis. During entry into mitosis, CDK1 and MASTL kinase repress the activity of mitotic protein phosphatases PP1 and PP2A. Mitotic exit requires partial dephosphorylation of MASTL by PP1, followed by dephosphorylation of PP2A. PP1 is partially reactivated by decreases in CDK1 activity. PP1 then reactivates PP1A. Mutations of MASTL have been associated with autosomal dominant thrombocytopenia, a decrease in the number of platelets circulating in blood. MASTL kinase is frequently upregulated in several cancers, and is correlated with cancer progression, poor patient survival and tumor recurrence. Ectopic expression of MASTL in tumor cells has been shown to promote cell proliferation, and MASTL has been identified as a target for therapeutic intervention.