

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MKP-3 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 363209
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MKP-3 Met1-Thr381 Accession # Q16828
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.

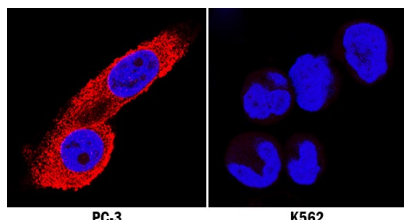
APPLICATIONS

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



MKP-3 in PC-3 and K562 Human Cell Lines. MKP-3 was detected in immersion fixed PC-3 human prostate cancer cell line (left panel; positive stain) and K562 human chronic myelogenous leukemia cell line (right panel; negative stain) using Mouse Anti-Human MKP-3 Monoclonal Antibody (Catalog # MAB35761) 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 # 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

MAP Kinase Phosphatase 3 (MKP-3), also called PYST1 and Dual Specificity Phosphatase 6 (DUSP6), dephosphorylates serine, threonine, and tyrosine residues in proteins. On Western blots, MKP-3 has an apparent molecular weight of 42 kilodaltons. It has a high degree of substrate selectivity for dephosphorylating ERK kinases over stress-related kinases such as p38 and JNK. MKP-3 is ubiquitinated prior to degradation in the proteasome. The rate of MKP-3 degradation is enhanced by ERK-mediated phosphorylation.