

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MKP-1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) MKP-2, rhMKP-3, or rhMKP-5 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 408612
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MKP-1 Met1-Cys367 Accession # P28562
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 as a 0.2 µm filtered solution in PBS.

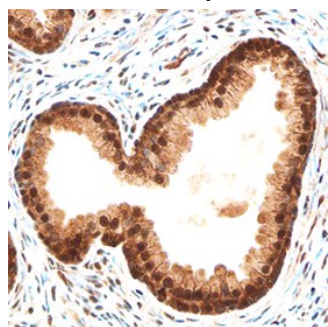
APPLICATIONS

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
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry



MKP-1 in Human Prostate. MKP-1 was detected in immersion fixed paraffin-embedded sections of human prostate using Rat Anti-Human MKP-1 Monoclonal Antibody (Catalog # MAB7168) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei and cytoplasm of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

MKP-1, also known as PTPN10, DUSP1, and CL100, is an approximately 45 kDa Ser/Thr protein phosphatase that dephosphorylates p38 MAPK and JNK. Acetylation of MKP-1 enhances this activity and limits the inflammation-induced signaling downstream of TLR proteins. Within aa 1-367, human MKP-1 shares 97% aa sequence identity with mouse and rat MKP-1.