

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human and rat PTK7/CCK4 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 525222
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PTK7/CCK4 Ala31-Ser199 Accession # Q13308
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.

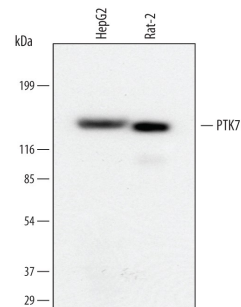
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Simple Western	20 µg/mL	See Below

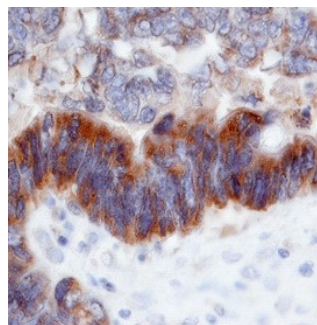
DATA

Western Blot



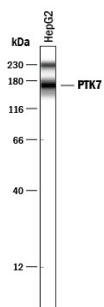
Detection of Human and Rat PTK7/CCK4 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line and Rat-2 rat embryonic fibroblast cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human/Rat PTK7/CCK4 Monoclonal Antibody (Catalog # MAB4499) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PTK7/CCK4 at approximately 160 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



PTK7/CCK4 in Human Colon Cancer Tissue. PTK7/CCK4 was detected in immersion fixed paraffin-embedded sections of human colon cancer tissue using Mouse Anti-Human/Rat PTK7/CCK4 Monoclonal Antibody (Catalog # MAB4499) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western



Detection of Human PTK7/CCK4 by Simple Western™. Simple Western lane view shows lysates of HepG2 human hepatocellular carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for PTK7/CCK4 at approximately 168 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human/Rat PTK7/CCK4 Monoclonal Antibody (Catalog # MAB4499). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.



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

Protein tyrosine kinase 7 (PTK7), also known as colon carcinoma kinase 4 (CCK4), is a receptor tyrosine kinase (RTK) involved in colon carcinoma development and/or proliferation. Similar to the RTK HER3, PTK7 contains a catalytically inactive tyrosine kinase domain, suggesting a potential tumor-characteristic role as a signal amplifier or modulator for an as yet unidentified kinase-competent partner. PTK7 may also play a role during gastrulation in the rodent embryo.