

DESCRIPTION

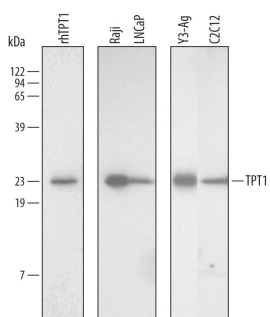
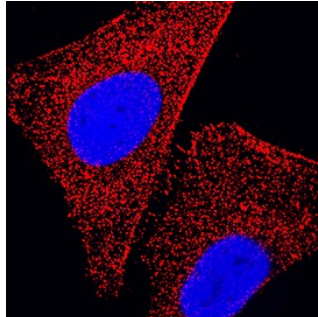
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat TPT1/TCTP in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 488411
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TPT1/TCTP Met1-Cys172 Accession # P13693
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
Western Blot	1 µg/mL	See Below
Immunocytochemistry	3-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human/Mouse/Rat TPT1/TCTP by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line, LNCaP human prostate cancer cell line, Y3-Ag rat myeloid cell line, and C2C12 mouse myoblast cell line. PVDF membrane was probed with 1 µg/mL Mouse Anti-Human/Mouse/Rat TPT1/TCTP Monoclonal Antibody (Catalog # MAB4648) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). For additional reference, recombinant human TPT1 (5 ng) was included. A specific band for TPT1/TCTP was detected at approximately 23 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.</p>	<p>Immunocytochemistry</p>  <p>TPT1/TCTP in HEL 92.1.7 Human Cell Line. TPT1/TCTP was detected in immersion fixed HEL 92.1.7 human erythroleukemic cell line using Mouse Anti-Human/Mouse/Rat TPT1/TCTP Monoclonal Antibody (Catalog # MAB4648) at 3 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 Non-adherent Cells.</p>
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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

TPT1 (translationally controlled tumor protein 1; also TCTP, HRF and fortilin) is a 23 kDa member of the TCTP family of calcium-binding proteins. It is widely expressed (but not in kidney), and apparently serves as a transcriptional activator, calcium transporter, histamine inducer and antiapoptotic, caspase-3 inhibitor. Human TPT1 is 172 amino acids (aa) in length, with multiple potential splice variants. There is an alternate start site at Met35 that may be accompanied by a deletion of aa 99-172. In addition, there may be either a 25 aa or 16 aa C-terminal extension after Cys172. Over aa 1-172, human TPT1 is 96% aa identical to mouse TPT1.