

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat TRAF-2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human TRAF-1, -3, -4, -5, or -6 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 324522
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TRAF-2 Met1-Leu501 Accession # Q12933
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.

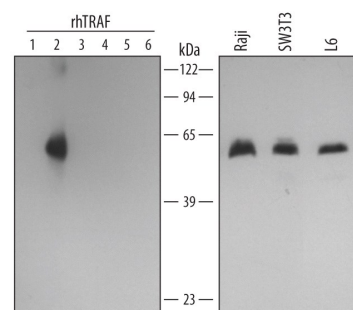
APPLICATIONS

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	0.25 µg/mL	See Below
Immunocytochemistry	3-25 µg/mL	See Below
Knockout Validated	TRAF-2 is specifically detected in HEK293T human embryonic kidney parental cell line but is not detectable in TRAF-2 knockout HEK293T cell line.	

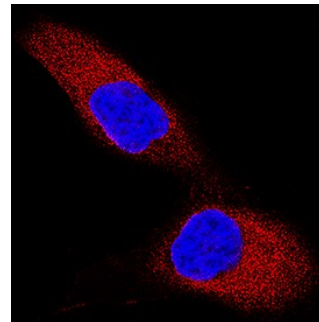
DATA

Western Blot



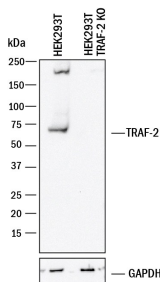
Detection of Human/Mouse/Rat TRAF-2 by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line, SW3T3 mouse contact inhibited fibroblast cell line, and L6 rat myoblast cell line. PVDF membrane was probed with 0.25 µg/mL Mouse Anti-Human/Mouse/Rat TRAF-2 Monoclonal Antibody (Catalog # MAB3277) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). For additional reference, recombinant human TRAF-1, -2, -3, -4, -5, and -6 (2 ng/lane) were included. A specific band for TRAF-2 was detected at approximately 56 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 2](#).

Immunocytochemistry



TRAF-2 in HeLa Human Cell Line. TRAF-2 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human/Mouse/Rat TRAF-2 Monoclonal Antibody (Catalog # MAB3277) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 567-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](#).

Knockout Validated



Western Blot Shows Human TRAF-2 Specificity by Using Knockout Cell Line. Western blot shows lysates of HEK293T human embryonic kidney parental cell line and TRAF-2 knockout HEK293T cell line (KO). PVDF membrane was probed with 0.25 µg/mL of Mouse Anti-Human/Mouse/Rat TRAF-2 Monoclonal Antibody (Catalog # MAB3277) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for TRAF-2 at approximately 62 kDa (as indicated) in the parental HEK293T cell line, but is not detectable in knockout HEK293T cell line. GAPDH (Catalog # MAB5718) is shown as a loading control. This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

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

Tumor Necrosis Factor (TNF) Receptor-Associated Factors (TRAFs) are a family of adaptor proteins that interact with a wide range of cell surface receptors and participate in the regulation of cell survival, proliferation, differentiation, and stress response. TRAFs were identified by their ability to form complexes with TNF receptor superfamily members but more recently are reported to also bind to Toll/IL-1 receptor family members and mediate cellular signaling. Six members of the TRAF family have been identified. All TRAF proteins have a homologous C-terminal TRAF domain that can bind the cytoplasmic domain of receptors as well as other TRAFs. TRAFs 2-6 have N-terminal RING and zinc finger domains that are involved in signaling downstream events. TRAF-2, also known as TNF Receptor-Associated Protein (TRAP), is a 501 amino acid, 56 kDa protein which interacts with the cytoplasmic domain of TNFR1, TNFR2 and CD40 to mediate the activation of NF-kappa-B and AP-1 family of transcription factors. TRAF-2 can self-associate as well as form heterodimers with TRAF-1.