

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse ERK1 and ERK2 dually phosphorylated at T202/Y204 or T185/Y187, respectively.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1088B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Phosphopeptide containing the human ERK1 T202/Y204 site Accession # P27361
Formulation	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

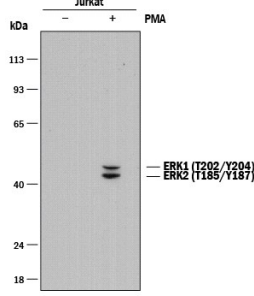
APPLICATIONS

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	1:1000 dilution	See Below
Simple Western	1:100 dilution	See Below

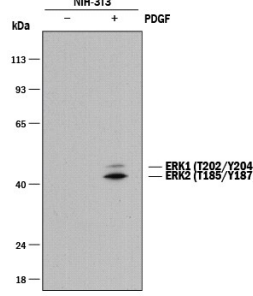
DATA

Western Blot



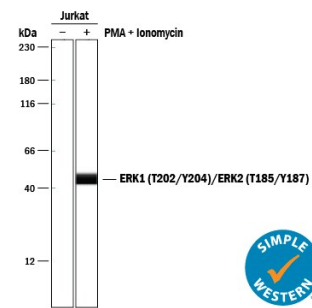
Detection of Human Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line untreated (-) or treated (+) with 200 nM PMA for 20 minutes. PVDF membrane was probed with 1:1000 dilution of Rabbit Anti-Human/Mouse Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) Monoclonal Antibody (Catalog # MAB18251) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Specific bands were detected for Phospho-ERK1 (T202/Y204) at approximately 44 kDa and Phospho-ERK2 (T185/Y187) at approximately 42 (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Western Blot




Detection of Mouse Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) by Western Blot. Western blot shows lysates of NIH-3T3 mouse embryonic fibroblast cell line untreated (-) or treated (+) with 10 ng/mL Recombinant Human PDGF-BB (Catalog # 220-BB) for 5 minutes. PVDF membrane was probed with 1:1000 dilution of Rabbit Anti-Human/Mouse Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) Monoclonal Antibody (Catalog # MAB18251) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Specific bands were detected for Phospho-ERK1 (T202/Y204) at approximately 44 kDa and Phospho-ERK2 (T185/Y187) at approximately 42 (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western



Detection of Human Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) by Simple Western™. Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line untreated (-) or treated (+) with PMA and Ionomycin, loaded at 0.2 mg/mL. Specific bands were detected for Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) at approximately 46-49 kDa (as indicated) using 1:100 dilution of Rabbit Anti-Human/Mouse Phospho-ERK1 (ERK1 T202/Y204, ERK2 T185/Y187) Monoclonal Antibody (Catalog # MAB18251). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. 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	<ul style="list-style-type: none"> • 12 months from date of receipt, -20 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after opening. • 6 months, -20 °C under sterile conditions after opening.

BACKGROUND

ERK1 and ERK2 (also known as MAPK3 and MAPK1) are 44- and 42-kDa Ser/Thr kinases, respectively. They are part of the Ras-Raf-ERK signal transduction cascade often found downstream of growth factor receptor activation. ERK1 and ERK2 were initially isolated and cloned as kinases activated in response to insulin and NGF. They are expressed in most, if not all, mammalian tissues. Dual threonine and tyrosine phosphorylation activate both ERKs, at Thr202/Tyr204 for human ERK1 and Thr185/Tyr187 for human ERK2. Within the range used as an immunogen, human, mouse, and rat ERK1 share 100% amino acid sequence identity.

PRODUCT SPECIFIC NOTICES

* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.