

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Profilin 1 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human Profilin 2 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 816536
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Profilin 1 Met1-Tyr140 Accession # P07737
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.

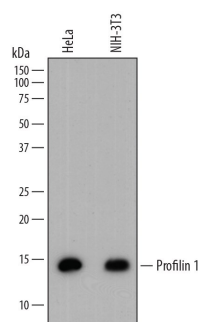
APPLICATIONS

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	0.2 µg/mL	See Below
Simple Western	20 µg/mL	Exosome Standards (LNCaP) (Catalog# NBP3-11687) and Jurkat human acute T cell leukemia cell line

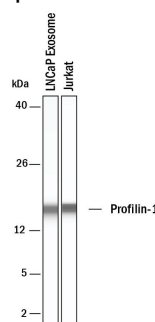
DATA

Western Blot



Detection of Human and Mouse Profilin 1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 0.2 µg/mL of Mouse Anti-Human Profilin 1 Monoclonal Antibody (Catalog # MAB7779) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # [HAF018](#)). A specific band was detected for Profilin 1 at approximately 14 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Simple Western



Detection of Human Profilin 1 by Simple Western™. Simple Western shows lysates of Exosome Standards (LNCaP) (Catalog # [NBP3-11687](#)) and Jurkat human acute T cell leukemia cell line, loaded at 0.5 mg/mL. A specific band was detected for Profilin 1 at approximately 17 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human Profilin 1 Monoclonal Antibody (Catalog # MAB7779). This experiment was conducted under reducing conditions and using the 2-40kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
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

Profilin 1 (gene name PFN1) is a ubiquitous, cytoplasmic, 140 amino acid, 12-15 kDa actin monomer-binding protein. It facilitates adenine nucleotide exchange, supplying ATP for actin filament polymerization. It is phosphorylated and acetylated, and binds proline-rich sequences. Human Profilin 1 shares 96% amino acid sequence identity with mouse and rat Profilin 1.