

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat p53.
Source	Monoclonal Mouse IgG _{2B} Clone # 184721
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human p53 Asp7-Asp393 Accession # P04637
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.

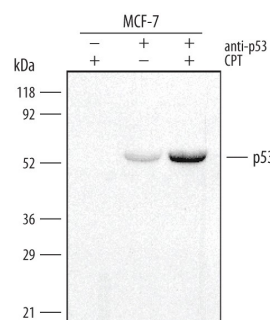
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below
Immunoprecipitation	1-2 µg/500 µg cell lysate	CEM human T-lymphoblastoid cell line, see our available Western blot detection antibodies

DATA

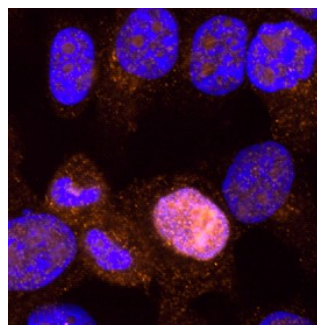
Western Blot



Detection of Human p53 by Western Blot.

Western blot shows lysates of MCF-7 human breast cancer cell line mock-treated (-) or treated (+) with 1 µM camptothecin (CPT) for 1 hour. Human p53 was immunoprecipitated using Mouse Anti-Human/Mouse/Rat p53 Monoclonal Antibody (Catalog # MAB1355). PVDF membrane was probed with HRP-conjugated Anti-Human/Mouse/Rat Polyclonal Antibody (Catalog # HAF1355). A specific band for p53 was detected at approximately 53 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



p53 in HeLa Human Cell Line. p53 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human/Mouse/Rat p53 Monoclonal Antibody (Catalog # MAB1355) 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 and nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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

The p53 tumor suppressor protein is a multi-functional transcription factor that regulates cellular decisions regarding proliferation, cell cycle checkpoints, and apoptosis. The importance of p53 is underscored by its mutation in over 50% of human cancers. Mice that lack one or both copies of p53 also showed an increased incidence of tumors, which makes the p53 deficient mouse a model system for studying cancer generation and progression.