

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human p53 when phosphorylated at S392
Source	Monoclonal Rabbit IgG Clone # 2185A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Phosphopeptide containing the human p53 S392 site 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 as a 0.2 µm filtered solution in PBS.

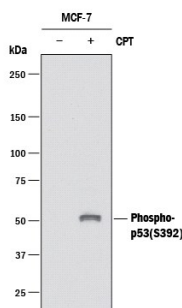
APPLICATIONS

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	2 µg/mL	See Below
Immunocytochemistry	3-25 µg/mL	See Below

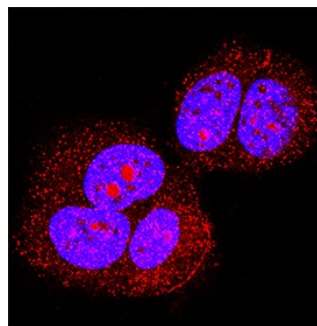
DATA

Western Blot



Detection of Human Phospho-p53 (S392) by Western Blot. Western blot shows lysates of MCF-7 human breast cancer cell line untreated (-) or treated (+) with 1µM Camptothecin (CPT) for 5 hours. PVDF membrane was probed with 2 µg/mL of Rabbit Anti-Human Phospho-p53 (S392) Monoclonal Antibody (Catalog # MAB2996) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Phospho-p53 (S392) at approximately 53 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Phospho-p53 (S392) in MCF-7 Human Cell Line. p53 phosphorylated at S392 was detected in immersion fixed MCF-7 human breast cancer cell line using Rabbit Anti-Human Phospho-p53 (S392) Monoclonal Antibody (Catalog # MAB2996) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) 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 acts to enforce cell cycle checkpoints or signal apoptosis in cells that have incurred genotoxic damage. The ATM or ATR kinases can phosphorylate p53 at serine 15 (S15), which leads to cell cycle arrest. Serine 15 phosphorylation leads to p53 stabilization and enhances transactivation of p53 target genes.