

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human p53 when phosphorylated at S392 in Western blots.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide containing human p53 S392 site
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	0.1 µg/mL	See Below
Simple Western	1 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 1 µM camptothecin (CPT) for 5 hours. PVDF membrane was probed with 0.1 µg/mL Rabbit Anti-Human Phospho-p53 (S392) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2996) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band for Phospho-p53 (S392) was detected at approximately 53 kDa (as indicated). The phospho-specificity of this antibody was supported by decreased labeling following treatment with 600 U λ-phosphatase (λ-PPase) for 1 hour. For additional reference, the membrane was stripped and reprobed with 1:5000 dilution of Human/Mouse/Rat p53 HRP-conjugated Antigen Affinity-purified Polyclonal Antibody (*lower panel*, Catalog # HAF1355). This experiment was conducted under reducing conditions and using *Immunoblot Buffer Group 1*.

Simple Western

Detection of Human Phospho-p53 (S392) by Simple Western™. Simple Western lane view shows lysates of MCF-7 human breast cancer cell line untreated (-) or treated (+) with 1 µM Camptothecin (CPT) for 5 hours, loaded at 0.5 mg/mL. A specific band was detected for Phospho-p53 (S392) at approximately 62 kDa (as indicated) using 1 µg/mL of Rabbit Anti-Human Phospho-p53 (S392) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2996). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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. p53 is phosphorylated at serine 392 in response to UV light and other genotoxic stressors. Phosphorylation of p53 at S392 stabilizes p53 tetramers and increases DNA binding activity.