

CATALOG No.: 54428-025

BACKGROUND:

The p53 tumor suppressor protein regulates cell cycle progression and cell survival in response to DNA damage and certain other cellular stresses by arresting cell cycle progression or by inducing apoptosis (1, 2). One of the most important mammalian cell cycle checkpoint proteins is the tumor suppressor p53. In normal, undamaged cells, p53 is rapidly degraded. Treating cells with a variety of DNA damage-inducing agents induces a transient accumulation of p53 protein and activates it as a transcription factor. It is frequently lost or mutated in multiple types of human cancer (3, 4). Human p53 protein has been shown to be phosphorylated at several N-terminal and C-Terminal sites that affect site-specific DNA binding and interaction with other cellular and viral proteins in vitro (5, 6). Serines 6, 9, 15, 20, 33, 37 phosphorylation occur after cells are exposed either to ionizing radiation or to UV light (7, 8).

SOURCE:

Rabbit anti-p53 (pSer37) polyclonal antibody was raised against a synthetic phosphopeptide (PLPpSQAM) corresponding to human p53 at the phosphorylated site of Serine 20.

REACTIVITY:

This epitope-affinity purified rabbit polyclonal antibody is specific for human p53 phosphorylated at the position of Serine 37. The antibody was evaluated for specificity with a dot blot assay using synthetic p53 peptides. It only recognized the phosphorylated serine 37 of human p53, not other phosphorylated sites or non-phosphorylated p53.

APPLICATION:

The optimal antibody working concentrations for specific applications should be determined by the investigator.

ELISA: Western blot:				0.1-1.0 μg/ml 0.5 to 2 μg/ml				
	Anti-p53 antibodies (1ug/ml)							
	pS6	6Sq	pS15	pS20	pS37	pS46	pS293	
pS6								
ਓ ^{pS9}								
P∰ pS15								
$\frac{2}{2}$ pS20			٠					
pS37				٠				
ਰੀ pS46					٠			
وي 2 pS392						٠		

This product is for research use only.

STORAGE:

This polyclonal antibody is supplied as an epitope-affinity purified rabbit IgG, 50 µg in 250 µl of 1X PBS (pH 7.4) containing 0.05% sodium azide. Store at 2-8 °C for up to 1 year. Avoid repeated freezing and thawing.

REFERENCES:

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