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PIG3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19269b

Product Information

Application	WB, E
Primary Accession	Q53FA7
Other Accession	NP_004872.2
Reactivity	Human
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30609
Calculated MW	35536
Antigen Region	174-203

Additional Information

Gene ID	9540
Other Names	Quinone oxidoreductase PIG3, 1---, Tumor protein p53-inducible protein 3, p53-induced gene 3 protein, TP53I3, PIG3
Target/Specificity	This PIG3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 174-203 amino acids from the C-terminal region of human PIG3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PIG3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TP53I3 (HGNC:19373)
Function	NADPH:quinone reductase which expression is induced by p53/TP53 and is involved in both the DNA damage response through homologous

recombination repair, and p53-mediated apoptosis (PubMed:19349281, PubMed:33782397). Catalyzes the NADPH-dependent reduction of quinones, exhibiting a low enzymatic activity with beta- naphthoquinones and a strong preference for the ortho-quinone isomer (1,2-beta-naphthoquinone) over the para isomer (1,4-beta- naphthoquinone). Also displays a low reductase activity for non-quinone compounds such as diamine and 2,6-dichloroindophenol (in vitro) (PubMed:19349281). The reduction of 1,2-naphthoquinone concurrently generates reactive oxygen species (ROS), which may trigger apoptosis downstream of p53/TP53 (PubMed:19349281).

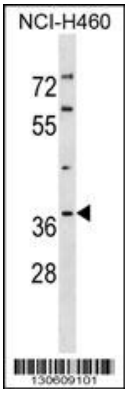
Background

The protein encoded by this gene is similar to oxidoreductases, which are enzymes involved in cellular responses to oxidative stresses and irradiation. This gene is induced by the tumor suppressor p53 and is thought to be involved in p53-mediated cell death. It contains a p53 consensus binding site in its promoter region and a downstream pentanucleotide microsatellite sequence. P53 has been shown to transcriptionally activate this gene by interacting with the downstream pentanucleotide microsatellite sequence. The microsatellite is polymorphic, with a varying number of pentanucleotide repeats directly correlated with the extent of transcriptional activation by p53. It has been suggested that the microsatellite polymorphism may be associated with differential susceptibility to cancer. At least two transcript variants encoding the same protein have been found for this gene.

References

Kotsinas, A., et al. Oncogene 29 (37), 5220 (2010) :
Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)
Lee, J.H., et al. Oncogene 29(10):1431-1450(2010)
Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)
Hosgood, H.D. III, et al. Occup Environ Med 66(12):848-853(2009)

Images



PIG3 Antibody (C-term)(Cat. #AP19269b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the PIG3 antibody detected the PIG3 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.