Datasheet for ABIN392853

anti-PPM1D antibody (C-Term)

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Overview

Quantity:	400 µL
Target:	PPM1D
Binding Specificity:	AA 571-602, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPM1D antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This PPM1D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 571-602 amino acids from the C-terminal region of human PPM1D.
Clone:	RB6018
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	PPM1D
Alternative Name:	PPM1D (PPM1D Products)

Target Details

Background:	PPM1D is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. Expression of this PPM1D gene is induced in a p53-dependent manner in response to various environmental stresses. While being induced by tumor suppressor protein TP53/p53, this phosphatase negatively regulates the activity of p38 MAP kinase, MAPK/p38, through which it reduces the phosphorylation of p53, and in turn suppresses p53-mediated transcription and apoptosis. This phosphatase thus mediates a feedback regulation of p38-p53 signaling that contributes to growth inhibition and the suppression of stress induced apoptosis. The PPM1D gene is located in a chromosomal region known to be amplified in breast cancer. The amplification of this gene has been detected in both breast cancer cell line and primary breast tumors, which suggests a role of this gene in cancer development.
Molecular Weight:	66675
NCBI Accession:	NP_003611
UniProt:	O15297
Pathways:	p53 Signaling, Cell Division Cycle

Application Details

Application Notes:	WB: 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C.
Expiry Date:	6 months

Publications

Product cited in:

Park, Song, Kim, Han, Seol, Jang, Choi: "p53-Independent expression of wild-type p53-induced phosphatase 1 (Wip1) in methylmethane sulfonate-treated cancer cell lines and human tumors." in: **The international journal of biochemistry & cell biology**, Vol. 44, Issue 6, pp. 896-904, (2012) (PubMed).

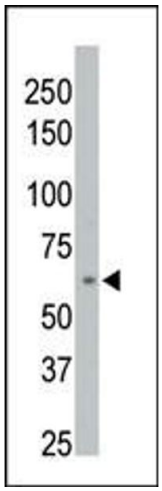
Song, Han, Sabapathy, Lee, Yu, Choi: "Expression of a homeostatic regulator, Wip1 (wild-type p53-induced phosphatase), is temporally induced by c-Jun and p53 in response to UV irradiation." in: **The Journal of biological chemistry**, Vol. 285, Issue 12, pp. 9067-76, (2010) (PubMed).

Moon, Lin, Zhang, Nguyen, Darlington, Waldman, Lu, Donehower: "Wild-type p53-induced phosphatase 1 dephosphorylates histone variant gamma-H2AX and suppresses DNA double strand break repair." in: **The Journal of biological chemistry**, Vol. 285, Issue 17, pp. 12935-47, (2010) (PubMed).

Zhang, Wan, Mlotshwa, Vance, Berger, Chen, Lu: "Oncogenic Wip1 phosphatase is inhibited by miR-16 in the DNA damage signaling pathway." in: **Cancer research**, Vol. 70, Issue 18, pp. 7176-86, (2010) (PubMed).

Nguyen, Slattery, Moon, Darlington, Lu, Donehower: "The oncogenic phosphatase WIP1 negatively regulates nucleotide excision repair." in: **DNA repair**, Vol. 9, Issue 7, pp. 813-23, (2010) (PubMed).

There are more publications referencing this product on: Product page



Western Blotting

Image 1. The anti-M1D Pab (ABIN392853 and ABIN2842271) is used in Western blot to detect M1D in 293 cell lysate.

