



Human PPM1D peptide (DAG-P1806)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	The protein encoded by this gene 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. The expression of this 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. This 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. [provided by RefSeq, Jul 2008]
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the PP2C family. Contains 1 PP2C-like domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	PPM1D protein phosphatase, Mg2+/Mn2+ dependent, 1D [Homo sapiens (human)]
Official Symbol	PPM1D

Synonyms	PPM1D; protein phosphatase, Mg2+/Mn2+ dependent, 1D; WIP1; PP2C-DELTA; protein phosphatase 1D; protein phosphatase Wip1; wild-type p53-induced phosphatase 1; protein phosphatase 2C delta isoform; protein phosphatase 1D magnesium-dependent, delta isoform;
Entrez Gene ID	8493
mRNA Refseq	NM_003620.3
Protein Refseq	NP_003611.1
UniProt ID	O15297
Chromosome Location	17q23.2
Pathway	p53 pathway, organism-specific biosystem; p53 signaling pathway, organism-specific biosystem; p53 signaling pathway, conserved biosystem;
Function	metal ion binding; protein binding; protein serine/threonine phosphatase activity;