



Anti-CDKN1A monoclonal antibody, clone EDT-60.3 (DMAB5419MH)

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

PRODUCT INFORMATION

Product Overview	Mouse anti-human p21WAF1/ Cip1/Sdi1/Pic1 (Mitotic Inhibitor) monoclonal antibody is intended for qualitative immunohistochemistry tissue sections, to be viewed by light microscopy. Clinical interpretation of staining results should be accompanied by histological studies with proper controls. Patients' clinical histories and other relevant diagnostic tests should be utilized by a qualified person(s) when evaluating and interpreting results.
Antigen Description	This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair.
Specificity	This antibody recognizes a 21 kD protein identified as p21WAF1/Cip1/Sdi1/Pic1 tumor suppressor protein. This antibody is highly specific to p21 and does not show any cross reactivity to other mitotic inhibitors. This antibody does not cross react with mouse and rat.
Immunogen	BALB/C mice were injected with a full length human recombinant p21 protein.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	EDT-60.3
Conjugate	Unconjugated

Applications	IHC
Cellular Localization	Nuclear
Positive Control	Colan carcinoma
Format	This antibody is supplied as purified immunoglobulin fraction ontaining sodium azide as a preservative.
Preservative	See individual product datasheet
Storage	Store at 2-8°C. Do not use beyond the expiration date stated on the label.

GENE INFORMATION

Gene Name	CDKN1A cyclin-dependent kinase inhibitor 1A (p21, Cip1) [Homo sapiens]
Synonyms	CDKN1A; cyclin-dependent kinase inhibitor 1A (p21, Cip1); cyclin-dependent kinase inhibitor 1; Cyclin-dependent kinase inhibitor 1; CDK-interacting protein 1; CAP20; CDKN1; CDKN1A; CIP1; P21; p21; PIC1; p21 / WAF1; p21Cip1/Waf1; p21CIP1; SDI1; WAF1; MDA-6; MDA6; DNA synthesis inhibitor; wild-type p53-activated fragment 1; melanoma differentiation associated protein 6; Melanoma differentiation-associated protein 6; OTTHUMP00000016297; OTTHUMP00000016298
Entrez Gene ID	1026
Protein Refseq	NP_000380
UniProt ID	A0A024RCX5
Chromosome Location	6p21.2
Pathway	AKT phosphorylates targets in the cytosol; AMPK signaling; Adipogenesis; Alpha6-Beta4 Integrin Signaling Pathway; Bladder cancer; C-MYB transcription factor network; Cell Cycle Checkpoints; Cell Cycle, Mitotic; Cell cycle; Chronic myeloid leukemia; Class
Function	cyclin binding; cyclin-dependent protein kinase activating kinase activity; cyclin-dependent protein kinase activity; cyclin-dependent protein kinase inhibitor activity; kinase activity; metal ion binding; protein binding; protein kinase inhibitor activit