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DMTF1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP17665b

Specification

DMTF1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9Y222

DMTF1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 9988

Other Names
Cyclin-D-binding Myb-like transcription factor 1, hDMTF1, Cyclin-D-interacting Myb-like protein 1, hDMP1, DMTF1, DMP1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DMTF1 Antibody (C-term) Blocking Peptide - Protein Information

Name DMTF1

Synonyms DMP1

Function
Transcriptional activator which activates the CDKN2A/ARF locus in response to Ras-Raf signaling, thereby promoting p53/TP53- dependent growth arrest (By similarity). Binds to the consensus sequence 5'-CCCG[GT]ATGT-3' (By similarity). Isoform 1 may cooperate with MYB to activate transcription of the ANPEP gene. Isoform 2 may antagonize transcriptional activation by isoform 1.

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00625, ECO:0000269|PubMed:17936562}

Tissue Location
Expressed at relatively low levels in colonic mucosa, ovary, peripheral leukocytes, prostate and small intestine, and at higher levels in spleen, testis and thymus. Expressed in multiple regions of the brain and CNS including amygdala, caudate, corpus callosum, hippocampus, substantia nigra and subthalamic nucleus Isoform 1 is the predominant isoform in monocytes, macrophages and neutrophils, isoform 2 is most strongly expressed in peripheral blood leukocytes and quiescent CD34 positive cells, and isoform 3 is expressed at low levels in all hematopoietic cell types.

Expression is frequently reduced in non-small-cell lung carcinomas (NSCLC) due to hemizygous gene deletion, strongly suggesting that this locus is haploinsufficient for tumor suppression. Loss of this locus frequently occurs in tumors which retain wild-type CDKN2A/ARF and p53/TP53 loci Hemizygous gene deletion has also been observed in leukemic blasts from patients with abnormalities of the long arm of chromosome 7

DMTF1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

DMTF1 Antibody (C-term) Blocking Peptide - Images

DMTF1 Antibody (C-term) Blocking Peptide - Background

This gene encodes a transcription factor that contains acyclin D-binding domain, three central Myb-like repeats, and twoflanking acidic transactivation domains at the N- and C-termini.The encoded protein is induced by the oncogenic Ras signalingpathway and functions as a tumor suppressor by activating thetranscription of ARF and thus the ARF-p53 pathway to arrest cellgrowth or induce apoptosis. It also activates the transcription ofaminopeptidase N and may play a role in hematopoietic celldifferentiation. The transcriptional activity of this protein isregulated by binding of D-cyclins. This gene is hemizygouslydeleted in approximately 40% of human non-small-cell lung cancerand is a potential prognostic and gene-therapy target fornon-small-cell lung cancer. Multiple transcript variants encodingdifferent isoforms have been found for this gene. [provided byRefSeq].

DMTF1 Antibody (C-term) Blocking Peptide - References

Liu, Y., et al. Mol. Psychiatry (2010) In press :Sugiyama, T., et al. Expert Rev. Mol. Diagn. 8(4):435-447(2008)Inoue, K., et al. Cancer Res. 68(12):4487-4490(2008)Tschan, M.P., et al. Leukemia 22(5):1087-1090(2008)Mallakin, A., et al. Cancer Cell 12(4):381-394(2007)