



Human DNMT3A peptide (DAG-P0364)

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

PRODUCT INFORMATION

Antigen Description	CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase that is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes to the cytoplasm and nucleus and its expression is developmentally regulated. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]
Specificity	Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the C5-methyltransferase family. Contains 1 ADD domain. Contains 1 GATA-type zinc finger. Contains 1 PHD-type zinc finger. Contains 1 PWWP 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	DNMT3A DNA (cytosine-5-)-methyltransferase 3 alpha [Homo sapiens (human)]
Official Symbol	DNMT3A
Synonyms	DNMT3A; DNA (cytosine-5-)-methyltransferase 3 alpha; DNMT3A2; M.HsaIIIA; DNA (cytosine-5)-methyltransferase 3A; DNA MTase HsaIIIA; DNA cytosine methyltransferase 3A2;

Entrez Gene ID	1788
mRNA Refseq	NM_022552.4
Protein Refseq	NP_072046.2
UniProt ID	Q9Y6K1
Chromosome Location	2p23
Pathway	Cysteine and methionine metabolism, organism-specific biosystem; Cysteine and methionine metabolism, conserved biosystem; Methionine degradation, organism-specific biosystem; Methionine degradation, conserved biosystem; MicroRNAs in cancer, organism-specific biosystem; MicroRNAs in cancer, conserved biosystem; One Carbon Metabolism, organism-specific biosystem; Trans-sulfuration and one carbon metabolism, organism-specific biosystem; Validated targets of C-MYC transcriptional repression, organis
Function	DNA (cytosine-5-)-methyltransferase activity; DNA (cytosine-5-)-methyltransferase activity, acting on CpG substrates; DNA binding; chromatin binding; metal ion binding; protein binding; unmethylated CpG binding;