

Datasheet for ABIN6141251
anti-GNMT antibody (AA 1-295)[Go to Product page](#)

2 Images

Overview

Quantity:	100 µL
Target:	GNMT
Binding Specificity:	AA 1-295
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GNMT antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-295 of human GNMT (NP_061833.1).
Sequence:	MVDSVYRTRS LGVAAEGLPD QYADGEAARV WQLYIGDTRS RTAEYKAWLL GLLRQHGCQR VLDVACGTGV DSIMLVEEGF SVTSVDASDK MLKYALKERW NRRHEPAFDK WVIEEANWMT LDKDVPQSAE GGFDAVICLG NSFAHLPDCK GDQSEHRLAL KNIASMVRAG GLLVIDHRNY DHILSTGCAP PGKNIYYKSD LTKDVTTSVL IVNNKAHMVT LDYTVQVPGA GQDGSPGLSK FRLSYYPHCL ASFTELLQAA FGGKCQHSVL GDFKPYKPGQ TYIPCYFIHV LKRTD
Isotype:	IgG
Cross-Reactivity:	Mouse, Rat
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

Target Details

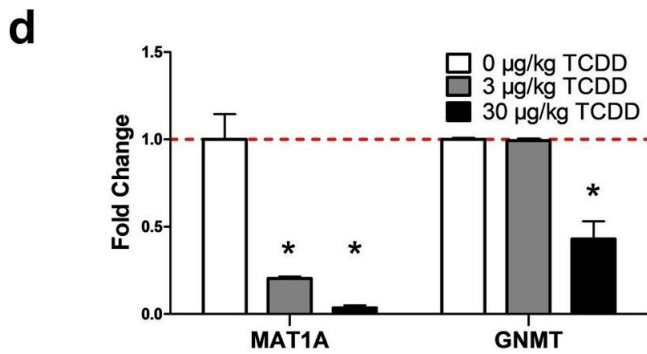
Target:	GNMT
Alternative Name:	GNMT (GNMT Products)
Background:	<p>The protein encoded by this gene is an enzyme that catalyzes the conversion of S-adenosyl-L-methionine (along with glycine) to S-adenosyl-L-homocysteine and sarcosine. This protein is found in the cytoplasm and acts as a homotetramer. Defects in this gene are a cause of GNMT deficiency (hypermethioninemia). Alternative splicing results in multiple transcript variants. Naturally occurring readthrough transcription occurs between the upstream CNPY3 (canopy FGF signaling regulator 3) gene and this gene and is represented with</p> <p>GeneID:107080644.,GNMT,HEL-S-182mP,Epigenetics & Nuclear Signaling,Cancer,Signal Transduction,Endocrine & Metabolism,Amino acid metabolism,GNMT</p>
Molecular Weight:	32 kDa
Gene ID:	27232
UniProt:	Q14749
Pathways:	Cellular Glucan Metabolic Process , Regulation of Carbohydrate Metabolic Process

Application Details

Application Notes:	WB,1:500 - 1:2000
Comment:	HIGH QUALITY
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
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:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.



Simple Western

Image 1. TCDD-elicited repression of SAM biosynthesis and methyltransferase gene expression. (a) Schematic pathway depicting enzymes (open rectangle) and metabolites (open circle) associated with SAM biosynthesis and utilization by methyltransferases (MT). (b) Hepatic levels of SAM and SAH were determined by LC-MS/MS (mean±s.e.m., n=5-6) at 8 and 28 days of repeated TCDD exposure and (c) hepatic gene expression of genes involved in the biosynthesis, regulation, and utilization of SAM and SAH were assessed at 8 and 28 days by RT-qPCR or RNA-seq, respectively (n=8). (d) Fold change for hepatic MAT1A and GNMT protein levels after 28 days measured by the WES capillary electrophoresis system (mean±s.e.m., n=4). (e) Hepatic gene expression associated with SAM metabolism was determined by RNA-seq for a time-course after a bolus dose of 30 µg/kg TCDD (n=5). For the heatmaps, the median effective dose (ED50) and benchmark dose lower limit (BMDL) and relative transcript count (rel. count,) are denoted. The red/blue color scale represents the log2(fold change) for differential gene expression. Orange represents the presence of putative dioxin response elements (pDREs). AhR enrichment peaks (FDR≤0.05) are denoted by light green. pDREs found within AHR ChIP-seq enrichment peaks are denoted by garnet. Asterisks (*) denote p<0.05 determined by one-way ANOVA with a Dunnett's post-hoc test. Pound signs (#) denote posterior probabilities P1(t)≥0.80 compared to vehicle. Official gene name and symbol, and metabolite abbreviations: Comt catechol-O-methyltransferase, Gamt guanidinoacetate N-methyltransferase, Gnmt glycine N-methyltransferase, Inmt indolethylamine N-transferase, Mat1a, Mat2a S-adenosylmethionine synthase isoform 1a or 2a, Nnmt nicotinamide N-methyltransferase, Pemt phosphatidylethanolamine N-methyltransferase, Sardh

sarcosine dehydrogenase, SAM S-adenosylmethionine, SAH S-adenosylhomocysteine. - figure provided by CiteAb.
Source: PMID32908189

Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using GNMT antibody.

