

## Anti-Dnmt3b antibody



Western Blot (WB) analysis of chicken sample using Dnmt3b Polyclonal Antibody. (STJ92753)



### Description

Dnmt3b is a protein encoded by the DNMT3B gene which is approximately 95,7 kDa. Dnmt3b is localised to the nucleus. It is involved in the mesodermal commitment pathway and sulfur amino acid metabolism. It is a methyltransferase which is thought to function in genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. Dnmt3b is expressed ubiquitously with the highest expression in foetal liver, heart, kidney and placenta. Mutations in the DNMT3B gene may result in immunodeficiency-centromeric. STJ92753 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of Dnmt3b protein.

<b>Model</b>	STJ92753
<b>Host</b>	Rabbit
<b>Reactivity</b>	Avian, Human
<b>Applications</b>	ELISA, IF, IHC, WB
<b>Immunogen</b>	Synthesized peptide derived from human Dnmt3b
<b>Immunogen Region</b>	1-80 aa, N-terminal
<b>Gene ID</b>	<a href="#">1789</a>
<b>Gene Symbol</b>	<a href="#">DNMT3B</a>
<b>Dilution range</b>	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
<b>Specificity</b>	Dnmt3b Polyclonal Antibody detects endogenous levels of Dnmt3b protein.

<b>Tissue Specificity</b>	Ubiquitous; highly expressed in fetal liver, heart, kidney, placenta, and at lower levels in spleen, colon, brain, liver, small intestine, lung, peripheral blood mononuclear cells, and skeletal muscle. Isoform 1 is expressed in all tissues except brain, skeletal muscle and PBMC, 3 is ubiquitous, 4 is expressed in all tissues except brain, skeletal muscle, lung and prostate and 5 is detectable only in testis and at very low level in brain and prostate.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Note</b>	For Research Use Only (RUO).
<b>Protein Name</b>	DNA cytosine-5-methyltransferase 3B Dnmt3b DNA methyltransferase HsaIIIB DNA MTase HsaIIIB M.HsaIIIB
<b>Molecular Weight</b>	96 kDa
<b>Clonality</b>	Polyclonal
<b>Conjugation</b>	Unconjugated
<b>Isotype</b>	IgG
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Concentration</b>	1 mg/ml
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.
<b>Database Links</b>	<a href="https://www.ncbi.nlm.nih.gov/RefSeq/record/MIM:158901">HGNC:29790MIM:158901</a>
<b>Alternative Names</b>	DNA cytosine-5-methyltransferase 3B Dnmt3b DNA methyltransferase HsaIIIB DNA MTase HsaIIIB M.HsaIIIB
<b>Function</b>	Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. May preferentially methylates nucleosomal DNA within the nucleosome core region. May function as transcriptional co-repressor by associating with CBX4 and independently of DNA methylation. Seems to be involved in gene silencing . In association with DNMT1 and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Isoforms 4 and 5 are probably not functional due to the deletion of two conserved methyltransferase motifs. Function as transcriptional corepressor by associating with ZHX1. Required for DUX4 silencing in somatic cells .
<b>Sequence and Domain Family</b>	The PWWP domain is essential for targeting to pericentric heterochromatin.
<b>Cellular Localization</b>	Nucleus
<b>Post-translational Modifications</b>	Sumoylated. Citrullinated by PADI4.