

## ESET Monoclonal Antibody

<b>Catalog No :</b>	YM0254
<b>Reactivity :</b>	Human;Mouse;Monkey
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	ESET
<b>Fields :</b>	>>Lysine degradation;>>Metabolic pathways;>>Signaling pathways regulating pluripotency of stem cells
<b>Gene Name :</b>	SETDB1
<b>Protein Name :</b>	Histone-lysine N-methyltransferase SETDB1
<b>Human Gene Id :</b>	9869
<b>Human Swiss Prot No :</b>	Q15047
<b>Mouse Swiss Prot No :</b>	O88974
<b>Immunogen :</b>	Purified recombinant fragment of human ESET expressed in E. Coli.
<b>Specificity :</b>	ESET Monoclonal Antibody detects endogenous levels of ESET protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	143kD

**Cell Pathway :** Lysine degradation;

**P References :**

1. Proteomics. 2005 Sep;5(14):3589-99.
2. Proc Natl Acad Sci U S A. 2006 Apr 4;103(14):5308-13.
3. Mol Cell Biochem. 2007 Nov;305(1-2):35-44.

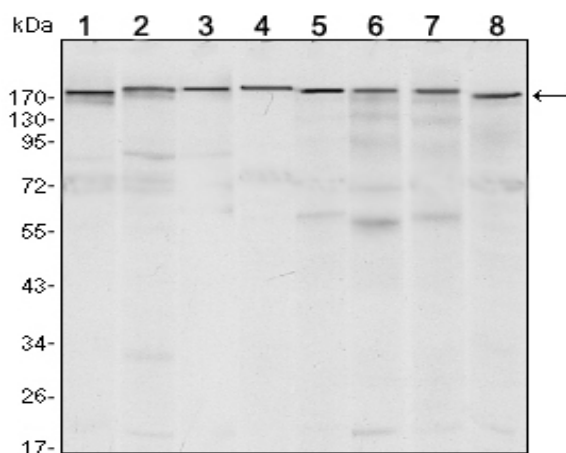
**Background :** SET domain bifurcated 1 (SETDB1) Homo sapiens This gene encodes a histone methyltransferase which regulates histone methylation, gene silencing, and transcriptional repression. This gene has been identified as a target for treatment in Huntington Disease, given that gene silencing and transcription dysfunction likely play a role in the disease pathogenesis. Alternatively spliced transcript variants of this gene have been described.[provided by RefSeq, Jun 2011],

**Function :** catalytic activity:S-adenosyl-L-methionine + histone L-lysine = S-adenosyl-L-homocysteine + histone N(6)-methyl-L-lysine.,domain:The pre-SET, SET and post-SET domains are all required for methyltransferase activity. The 347-amino-acid insertion in the SET domain has no effect on the catalytic activity.,function:Histone methyltransferase that specifically trimethylates 'Lys-9' of histone H3. H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. Mainly functions in euchromatin regions, thereby playing a central role in the silencing of euchromatic genes. H3 'Lys-9' trimethylation is coordinated with DNA methylation. Probably forms a complex with MBD1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation. Its activity is depende

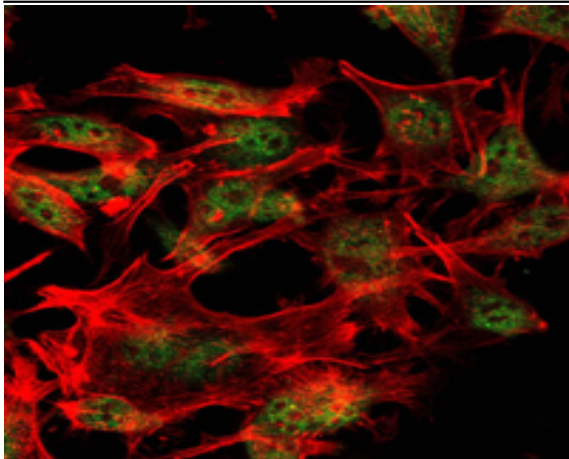
**Subcellular Location :** Nucleus . Cytoplasm . Chromosome. Associated with non-pericentromeric regions of chromatin. Excluded from nucleoli and islands of condensed chromatin.

**Expression :** Widely expressed. High expression in testis.

## Products Images



Western Blot analysis using ESET Monoclonal Antibody against MCF-7 (1), T47D (2), HEK293 (3), JURKAT (4), NIH/3T3 (5), F9 (6), RAW246.7 (7) and Cos7 (8) cell lysate.



Immunofluorescence analysis of LOVO cells using ESET Monoclonal Antibody (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.