Best Tools for immunology Research

ESET Monoclonal Antibody

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

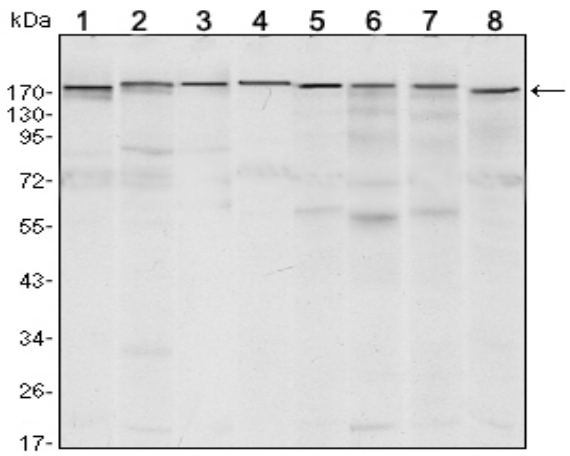
Background : SET domain bifurcated 1(SETDB1) Homo sapiens This gene encodes a histone methyltransferase which regulates histone methylation, gene silencing, and transcriptional repression. This gene has been identified as a target for treatment in Huntington Disease, given that gene silencing and transcription 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

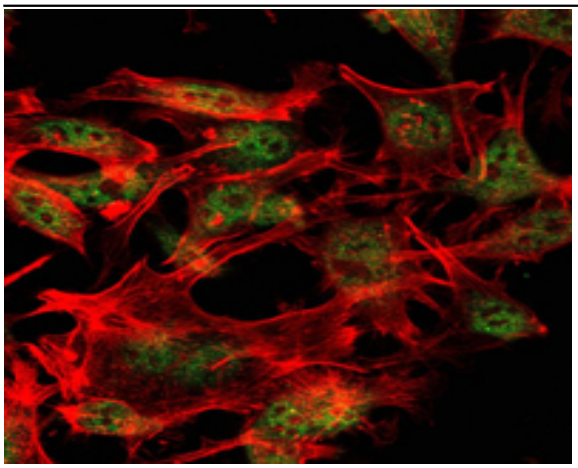
Subcellular Location : Nucleus . Cytoplasm . Chromosome. Associated with non-pericentromeric regions of chromatin. Excluded from nucleoli and islands of condensed chromatin. .

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.