

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 Q15047

No:

Mouse Swiss Prot

No:

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.

O88974

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 143kD

1/3

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.

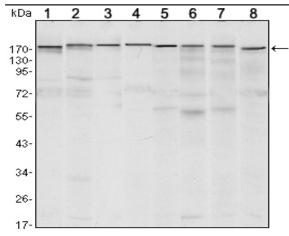
Sort : 5766

No4: 1

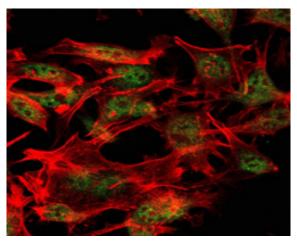
Host: Mouse

Modifications: Unmodified

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.