

# Anti-SETDB1 Antibody [A12-H6]

EM1709-76



<b>Product Type:</b>	Mouse monoclonal IgG1, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Green monkey
<b>Applications:</b>	WB, IF-Cell
<b>Molecular Wt:</b>	Predicted band size: 143 kDa
<b>Clone number:</b>	A12-H6

**Description:** ERG-associated protein with SET domain (ESET), also designated Histone H3-K9 methyltransferase 4 or SET domain bifurcated 1, is a nuclear protein belonging to the histone-lysine methyltransferase family and to the Suvar3-9 subfamily. It is a highly conserved protein of 150 amino acids that has been implicated in chromatin structure modulation. ESET is excluded from cell nucleoli and areas of condensed chromatin and can associate with the nonpericentromeric regions of chromatin. The gene encoding for this protein, SETDB1, maps to chromosome 1q21. ESET is a histone methyltransferase, methylating Lys-9 of histone H3 and mutations within the SETDB1 gene abolishes its methyltransferase activity. This methylation acts as a tag for epigenetic transcriptional repression by rounding up HP1 proteins to methylated histones. ESET is widely expressed with highest levels found in testis.

**Immunogen:** Purified recombinant fragment of human SETDB1 aa 868-1211.

**Positive control:** Jurkat cell lysate, T-47D cell lysate, 293T cell lysate, NIH/3T3 cell lysate, COS-1 cell lysate, LOVO.

**Subcellular location:** Nucleus.

**Database links:** SwissProt: Q15047 Human | O88974 Mouse

**Recommended Dilutions:**

<b>WB</b>	1:500-1:2,000
<b>IF-cell</b>	1:200-1:1,000

**Storage Buffer:** Purified antibody in PBS with 0.05% sodium azide.

**Storage Instruction:** 4°C; -20°C for long term storage.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

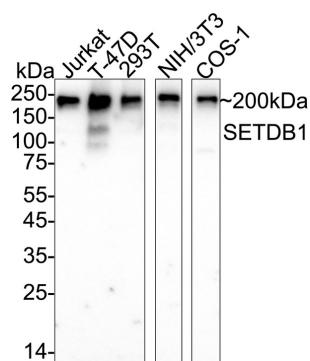
Technical:0086-571-89986345

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## Images

**Fig1:** Western blot analysis of SETDB1 on different lysates with Mouse anti-SETDB1 antibody (EM1709-76) at 1/1,000 dilution.



Lane 1: Jurkat cell lysate  
 Lane 2: T-47D cell lysate  
 Lane 3: 293T cell lysate  
 Lane 4: NIH/3T3 cell lysate  
 Lane 5: COS-1 cell lysate

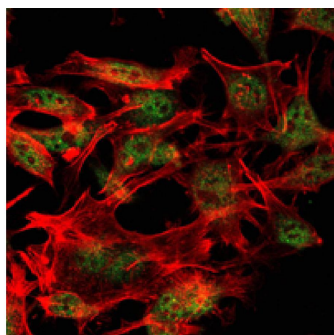
Lysates/proteins at 20 µg/Lane.

Predicted band size: 143 kDa  
 Observed band size: 200 kDa

Exposure time: 59 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (EM1709-76) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.



**Fig2:** ICC staining SETDB1 (green) and actin filaments (red) in LOVO cells. Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

### Background References

- Alarcon V et al. The enzymes LSD1 and Set1A cooperate with the viral protein HBx to establish an active hepatitis B viral chromatin state. *Sci Rep* 6:25901 (2016).
- Hatanaka Y et al. Histone chaperone CAF-1 mediates repressive histone modifications to protect preimplantation mouse embryos from endogenous retrotransposons. *Proc Natl Acad Sci U S A* 112:14641-6 (2015).

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