

### SET / TAF-I Antibody (aa66-81)

**Rabbit Polyclonal Antibody** Catalog # ALS12100

### **Specification**

### SET / TAF-I Antibody (aa66-81) - Product Information

**Application** WB, IHC **Primary Accession** 001105

Reactivity Human, Mouse, Rat, Zebrafish, Hamster,

Monkey, Pig, Chicken, Horse, Xenopus,

**Bovine** Rabbit

Host Clonality **Polyclonal** Calculated MW 33kDa KDa

### SET / TAF-I Antibody (aa66-81) - Additional Information

#### **Gene ID 6418**

### **Other Names**

Protein SET, HLA-DR-associated protein II, Inhibitor of granzyme A-activated DNase, IGAAD, PHAPII, Phosphatase 2A inhibitor I2PP2A, I-2PP2A, Template-activating factor I, TAF-I, SET

#### Target/Specificity

Synthetic peptides of amino acids 66-81 and 135-151 of human SET (Q01105). Sequence homology is 100% in mouse and rat.

# **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

### **Precautions**

SET / TAF-I Antibody (aa66-81) is for research use only and not for use in diagnostic or therapeutic procedures.

### SET / TAF-I Antibody (aa66-81) - Protein Information

### Name SET

### **Function**

Multitasking protein, involved in apoptosis, transcription, nucleosome assembly and histone chaperoning. Isoform 2 anti-apoptotic activity is mediated by inhibition of the GZMA-activated DNase, NME1. In the course of cytotoxic T-lymphocyte (CTL)-induced apoptosis, GZMA cleaves SET, disrupting its binding to NME1 and releasing NME1 inhibition. Isoform 1 and isoform 2 are potent inhibitors of protein phosphatase 2A. Isoform 1 and isoform 2 inhibit EP300/CREBBP and PCAF- mediated acetylation of histones (HAT) and nucleosomes, most probably by masking the accessibility of lysines of histones to the acetylases. The predominant target for inhibition is histone H4. HAT inhibition leads to silencing of HAT-dependent transcription and prevents active demethylation of DNA. Both isoforms stimulate DNA replication of the adenovirus genome



complexed with viral core proteins; however, isoform 2 specific activity is higher.

### **Cellular Location**

Cytoplasm, cytosol. Endoplasmic reticulum. Nucleus, nucleoplasm. Note=In the cytoplasm, found both in the cytosol and associated with the endoplasmic reticulum. The SET complex is associated with the endoplasmic reticulum. Following CTL attack and cleavage by GZMA, moves rapidly to the nucleus, where it is found in the nucleoplasm, avoiding the nucleolus. Similar translocation to the nucleus is also observed for lymphocyte-activated killer cells after the addition of calcium

#### **Tissue Location**

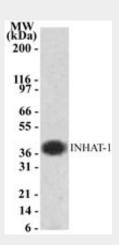
Widely expressed. Low levels in quiescent cells during serum starvation, contact inhibition or differentiation. Highly expressed in Wilms' tumor

### SET / TAF-I Antibody (aa66-81) - Protocols

Provided below are standard protocols that you may find useful for product applications.

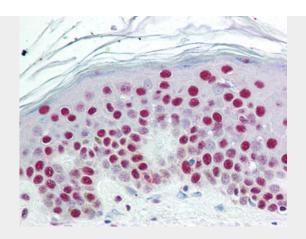
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# SET / TAF-I Antibody (aa66-81) - Images



Western blot of INHAT-1 using antibody against Jurkat cell lysate.





Anti-SET antibody IHC of human skin.

### SET / TAF-I Antibody (aa66-81) - Background

Multitasking protein, involved in apoptosis, transcription, nucleosome assembly and histone chaperoning. Isoform 2 anti-apoptotic activity is mediated by inhibition of the GZMA-activated DNase, NME1. In the course of cytotoxic T- lymphocyte (CTL)-induced apoptosis, GZMA cleaves SET, disrupting its binding to NME1 and releasing NME1 inhibition. Isoform 1 and isoform 2 are potent inhibitors of protein phosphatase 2A. Isoform 1 and isoform 2 inhibit EP300/CREBBP and PCAF-mediated acetylation of histones (HAT) and nucleosomes, most probably by masking the accessibility of lysines of histones to the acetylases. The predominant target for inhibition is histone H4. HAT inhibition leads to silencing of HAT-dependent transcription and prevents active demethylation of DNA. Both isoforms stimulate DNA replication of the adenovirus genome complexed with viral core proteins; however, isoform 2 specific activity is higher.

## SET / TAF-I Antibody (aa66-81) - References

von Lindern M.,et al.Mol. Cell. Biol. 12:3346-3355(1992). Vaesen M.,et al.Biol. Chem. Hoppe-Seyler 375:113-126(1994). Nagata K.,et al.Proc. Natl. Acad. Sci. U.S.A. 92:4279-4283(1995). Li M.,et al.J. Biol. Chem. 271:11059-11062(1996). Tsujio I.,et al.FEBS Lett. 579:363-372(2005).