

# SET Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP14581a

### **Specification**

#### SET Antibody (N-term) Blocking Peptide - Product Information

**Primary Accession** 

<u>001105</u>

# SET Antibody (N-term) Blocking Peptide - 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

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# SET Antibody (N-term) Blocking Peptide - 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 Antibody (N-term) Blocking Peptide - Protocols

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

## • Blocking Peptides

SET Antibody (N-term) Blocking Peptide - Images

# SET Antibody (N-term) Blocking Peptide - Background

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### SET Antibody (N-term) Blocking Peptide - References

Kim, D.W., et al. Biochem. Biophys. Res. Commun. 400(3):419-425(2010)Chao, A., et al. Cancer Lett. 291(1):99-107(2010)Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010):Samanta, A.K., et al. Oncogene 28(14):1669-1681(2009)Kajiwara, Y., et al. PLoS ONE 4 (4), E5071 (2009):