

**Goat Anti-SET / I2 alpha PP2A Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1981a****Specification**

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**Goat Anti-SET / I2 alpha PP2A Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q01105</a>
Other Accession	<a href="#">NP_003002</a> , <a href="#">6418</a>
Reactivity	Human
Predicted	Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	33489

**Goat Anti-SET / I2 alpha PP2A Antibody - 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**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-SET / I2 alpha PP2A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-SET / I2 alpha PP2A Antibody - 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

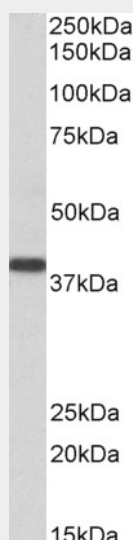
Widely expressed. Low levels in quiescent cells during serum starvation, contact inhibition or differentiation. Highly expressed in Wilms' tumor

### Goat Anti-SET / I2 alpha PP2A Antibody - Protocols

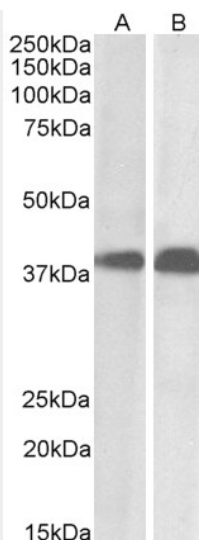
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

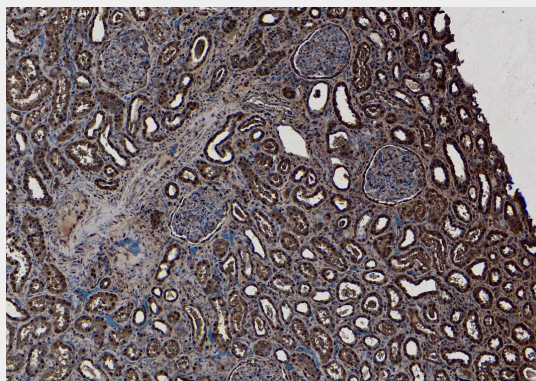
### Goat Anti-SET / I2 alpha PP2A Antibody - Images



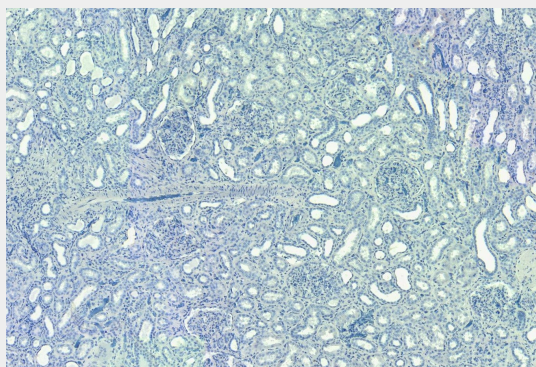
EB05148 (0.3µg/ml) staining of Human Kidney lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB05148 (0.01 $\mu$ g/ml) staining of Daudi (A) and Molt4 (B) cell lysate (35 $\mu$ g protein in RIPA buffer). Detected by chemiluminescence.



EB05148 (7 $\mu$ g/ml) staining of paraffin embedded Human Kidney. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB05148 Negative Control showing staining of paraffin embedded Human Kidney, with no primary antibody.

#### Goat Anti-SET / I2 alpha PP2A Antibody - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.

Decreased expression of microRNA-199b increases protein levels of SET (protein phosphatase 2A inhibitor) in human choriocarcinoma. Chao A, et al. Cancer Lett, 2010 May 1. PMID 19900756.

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

FE65 binds Teashirt, inhibiting expression of the primate-specific caspase-4. Kajiwar Y, et al. PLoS One, 2009. PMID 19343227.

Jak2 inhibition deactivates Lyn kinase through the SET-PP2A-SHP1 pathway, causing apoptosis in drug-resistant cells from chronic myelogenous leukemia patients. Samanta AK, et al. Oncogene, 2009 Apr 9. PMID 19234487.