

For Research Use Only

# CoraLite® Plus 488-conjugated SETDB1 Monoclonal antibody



Catalog Number: CL488-66293

## Basic Information

<b>Catalog Number:</b> CL488-66293	<b>GenBank Accession Number:</b> BC009362	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 9869	<b>CloneNo.:</b> 1H6E5
<b>Source:</b> Mouse	<b>Full Name:</b> SET domain, bifurcated 1	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 143 kDa	
<b>Immunogen Catalog Number:</b> AG21644	<b>Observed MW:</b> 170-180 kDa	

## Applications

**Tested Applications:**  
FC (Intra)

**Species Specificity:**  
human, mouse, rat

## Background Information

SETDB1, also named as ESET, KIAA0067 and KMT1E, belongs to the histone-lysine methyltransferase family. It is a SET domain protein with histone H3-K9-specific methyltransferase activity. H3 'Lys-9' trimethylation is coordinated with DNA methylation and represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. SETDB1 mainly functions in euchromatin regions, thereby playing a central role in the silencing of euchromatic genes. It probably forms a complex with MBD1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation. Its activity is dependent on MBD1 and is heritably maintained through DNA replication by being recruited by CAF-1. SETDB1 regulates histone methylation, gene silencing, and transcriptional repression. It 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. The calculated molecular weight of SETDB1 is 143 kDa, but the modified SETDB1 protein is about 170 kDa (PMID: 11791185).

## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

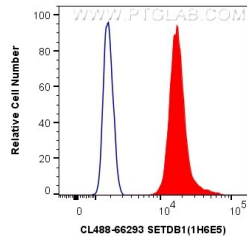
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
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## Selected Validation Data



1X10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human SETDB1 (CL488-66293, Clone:1H6E5) (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).