

SETDB1 active protein

Recombinant SETDB1 protein

CATALOG #
AAA60312

HOST
Baculovirus

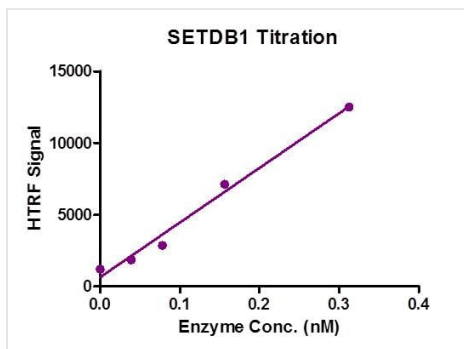
PRODUCT SYNONYMS

SETDB1; Recombinant SETDB1 protein; SET Domain Bifurcated 1; ERG-Associated Protein With SET Domain; Histone H3-K9 Methyltransferase 4; SETDB1 active protein

PRODUCT SPECIFICATIONS

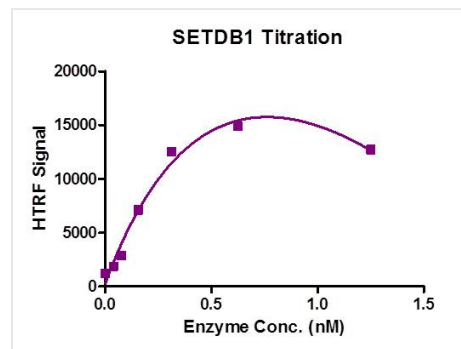
Host	Baculovirus
Purity/Purification	>85%
Form/Format	Recombinant SETDB1 protein is supplied in 25 mM HEPES pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Protein Details	Recombinant human SETDB1 protein was expressed in a baculovirus expression system as the full length protein (accession number NP_001138887.1) with an N-terminal DYKDDDDK tag. The molecular weight of the protein is 145 kDa.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage.

IMAGES



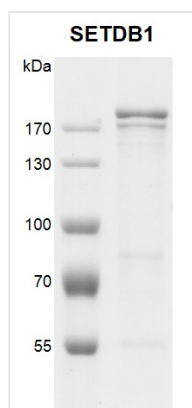
Bioactivity

HTRF assay for Recombinant SETDB1 protein activity. 1 μ M histone peptide H3 (1-21) was incubated with SETDB1 in reaction buffer including 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP and 50 μ M SAM for 3 hours at room temperature. H3K9me2 antibody was used to detect reaction product.



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SDS-PAGE

Recombinant SETDB1 protein gel. SETDB1 protein was run on a 10% SDS-PAGE gel and stained with Coomassie Blue. MW: 145 kDa Purity: > 85%

ADDITIONAL INFORMATION

Related Product Information for SETDB1 active protein

Recombinant SETDB1 (accession number NP_001138887.1) was expressed in Sf9 cells and contains an N-terminal DYKDDDDK tag with an observed molecular weight of 145 kDa. SETDB1 (SET Domain, Bifurcated 1) is a histone methyltransferase that methylates histone H3 at lysine 9. H3K9 methylation is associated with transcriptional repression and gene silencing through recruitment of HP1 proteins to methylated histones. H3K9 trimethylation is coordinated with DNA methylation, most likely through formation of a complex with MBD1 and ATF7IP that leads to transcriptional repression. SETDB1 activity is dependent on MBD1 and is heritably maintained through DNA replication by being recruited by CAF-1. SETDB1 is targeted to histone H3 by TRIM28, a factor recruited by KRAB zinc-finger proteins. Aberrant SETDB1 function is associated with the pathogenesis of Huntington Disease. Recombinant SETDB1 can be used to study enzyme kinetics and perform inhibitor screening assays.

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Product Categories/Family for SETDB1 active protein

[Histone Methyltransferase \(HMT\)](#); [Transcription](#); [Recombinant Proteins](#)

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/baculovirus-active-protein/setdb1/60312>