Recombinant SETD1B-SET complex



Catalog No: 81342, 81642 Quantity: 20, 1000 μg
Expressed In: Baculovirus Concentration: 0.8 μg/μl

Source: Human

Buffer Contents: Recombinant SETD1B-SET Complex is supplied in 25 mM HEPESNaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

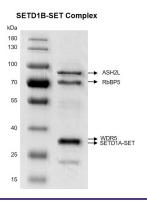
Background: SETD1B (SET Domain Containing 1B, Histone Lysine Methyltransferase) is a component of a histone methyltransferase (HMT) complex (contain SETD1B-SET ASH2L, RBBP5, WDR5) that produces mono-, di-, and trimethylated histone H3 at Lys4, but not if the neighboring 'Lys-9' residue is already methylated. Trimethylation of histone H3 at lysine 4 (H3K4me3) is a chromatin modification known to generally mark the transcription start sites of active genes. The protein contains SET domains, a RNA recognition motif domain and is a member of the class V-like SAM-binding methyltransferase superfamily.

Protein Details: Recombinant SETD1B-SET Complex that includes amino acids 1669-1966 of human SETD1B protein (accession number NP_001340274.1) with a N-terminal FLAG tag and full length human WDR5 protein (accession number NP_060058.1) without tag and full length human RBBP5 protein (accession number NP_005048.2) without tag and full length human ASH2L protein (accession number NP_001098684.1) without tag was expressed in Sf9 cells. The molecular weights of SETD1A-SET, WDR5, RBBP5,ASH2L are 35.7 kDa, 36.6 kDa, 59.2 kDa and 68.7 kDa, respectively.

Application Notes: This complex is suitable for use in protein-protein interaction, in vitro transcription assay, binding assays.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.





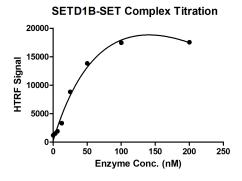
Recombinant SETD1B-SET Complex

10% SDS-PAGE with Coomassie blue staining

MW of SETD1B-SET: 35.7 kDa

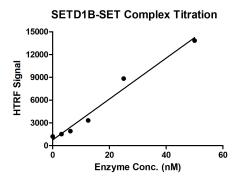
MW of WDR5: 36.6 kDa MW of RBBP5: 59.2 kDa MW of ASH2L: 68.7 kDa

Purity: >90%



HTRF assay for SETD1B-SET Complex activity

1 μ M H3 (1-21) was incubated with different concentrations of SETD1B-SET Complex in a 10 μ l reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl2, 1 mM TCEP and 100 μ M SAM for 2 hour, then 10 μ l H3K4me2 antibody and SA-XL665 mixture (1:100 dilution in the same buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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