Recombinant SETD1A-SET complex

Catalog No: 81341, 81641
Expressed In: Baculovirus

Quantity: 20, 1000 µg
Concentration: 0.4 µg/µl
Source: Human

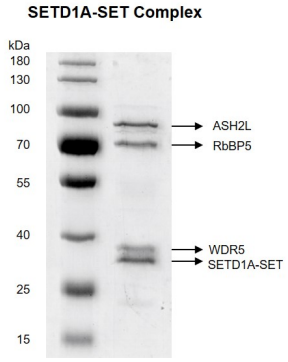
Buffer Contents: Recombinant SETD1A-SET Complex is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

Background: SETD1A (SET Domain Containing 1A, Histone Lysine Methyltransferase) is a component of a histone methyltransferase (HMT) complex (contain SETD1A-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: SETD1A (SET Domain Containing 1A, Histone Lysine Methyltransferase) is a component of a histone methyltransferase (HMT) complex (contain SETD1A-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.

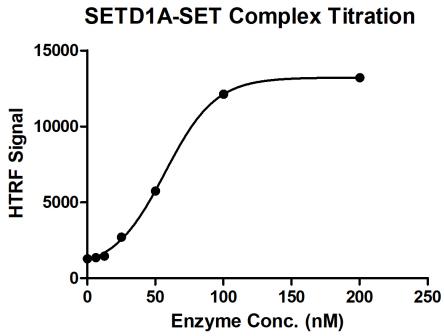
Application Notes: This complex is suitable for use in protein-protein interaction, in vitro transcription assay, binding assays.

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.



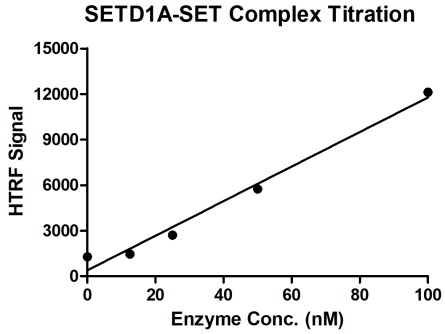
Recombinant SETD1A-SET Complex

10% SDS-PAGE with Coomassie blue staining
MW of SETD1A-SET: 35.2 kDa
WDR5 of 36.6 kDa
RBBP5 of 59.2 kDa
ASH2L of 68.7 kDa
Purity: >95%



HTRF assay for SETD1A-SET Complex activity

1 µM H3 (1-21) was incubated with different concentrations of SETD1A-SET Complex in a 10 µl reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl2, 1 mM TCEP and 100 µM SAM for 2 hour, then 10 µl 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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