

Recombinant EZH1 Complex

Catalog No: 31500, 31904

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 1 µg/µl

Source: Human

Buffer Contents: Recombinant EZH1 Complex was expressed in Sf9 cells and supplied at a concentration of 1 µg/µl in 25 mM Hepes pH 7.5, 300 mM NaCl, 5% Glycerol, 0.04% Triton X-100, 0.2 mM TCEP.

Background: **EZH1** (Enhancer Of Zeste Homolog 1) is a Polycomb group (PcG) protein. Catalytic subunit of the PRC2/EED-EZH1 complex, which methylates 'Lys-27' of histone H3, leading to transcriptional repression of the affected target gene. Able to mono-, di- and trimethylate 'Lys-27' of histone H3 to form H3K27me1, H3K27me2 and H3K27me3, respectively. Required for embryonic stem cell derivation and self-renewal, suggesting that it is involved in safeguarding embryonic stem cell identity. Compared to EZH1-containing complexes, it is less abundant in embryonic stem cells, has weak methyltransferase activity and plays a less critical role in forming H3K27me3, which is required for embryonic stem cell identity and proper differentiation.

Protein Details: Recombinant EZH1 Complex contains full length human EZH1 protein (Accession number NP_001982.2) with N-terminal Flag tag and MW= 86.3 kDa; full length human SUZ12 (Accession No. NP_056170.2), with N-terminal 6×His tag and MW= 86.1 kDa; full length human EED (Accession No. NP_003788.2), N-terminal 6×His tag and MW= 53.2 kDa; full length human RbAp46 (Accession No. NP_001185648.1), N-terminal 6×His-tag and MW= 55.3 kDa, and full length human RbAp48 (Accession No. NP_005601.1), N-terminal 6×His-tag and MW= 50.7 kDa, all individually expressed in Sf9 cells. The recombinant protein is >95% pure by SDS-PAGE.

Application Notes: Recombinant EZH1 Complex is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

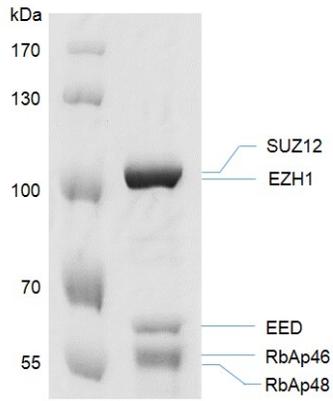
Specific Activity: H3K27me(1-3) methyltransferase

HMT Assay Conditions: 3.3 µM H3K27me0 (16-37aa) peptide was incubated with different concentrations of recombinant EZH1 Complex in reaction buffer containing 50 mM TrisCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP, 100 µM SAM for 3 hours at room temperature. Activity was detected by HTRF.

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 guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

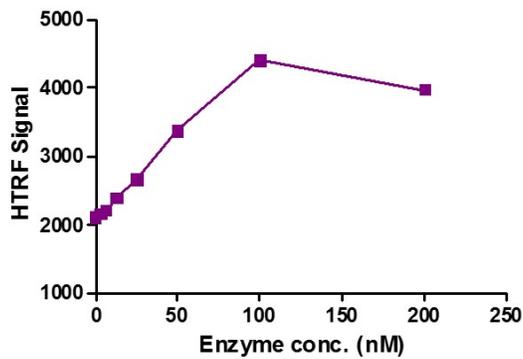
EZH1 Complex



Recombinant EZH1 Complex gel

EZH1 Complex was run on an 10% SDS-PAGE gel and stained with Coomassie blue.

EZH1 Complex Titration



Recombinant EZH1 Complex HTRF activity assay

3.3 μ M H3K27me0 (16-37aa) peptide was incubated with EZH1 Complex in reaction buffer for 3 hour at room temperature. EZH1 Complex was used in a HTRF assay to determine enzyme linearity. Methylated peptide (H3K27me1) was measured using H3K27me1-specific antibody.