

PRC2 recombinant protein

Recombinant PRC2 complex

CATALOG #
AAA59652

HOST
Baculovirus

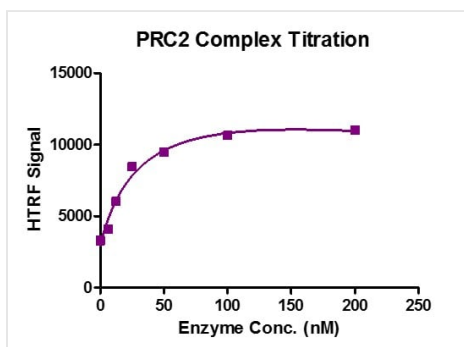
PRODUCT SYNONYMS

PRC2; Recombinant PRC2 complex; PRC2 recombinant protein

PRODUCT SPECIFICATIONS

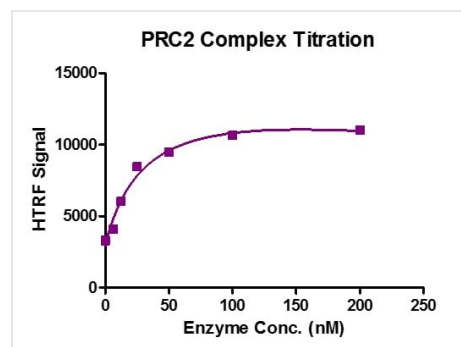
Host	Baculovirus
Form/Format	Recombinant PRC2 Complex is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 5% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
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. Shipping Temp: Dry Ice

IMAGES



Application Data

HTRF assay for PRC2 Complex activity 1 μ M H3 (16-37) peptide was incubated with different concentrations of PRC2 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 50 μ M SAM for 3 hours, then 10 μ l of H3K27me1 antibody and SA-XL665 mixture (each 1:100 dilution in HTRF Detection Buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at RT. HTRF assay was used for detection.



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SDS-PAGE

Recombinant PRC2 Complex gel. PRC2 Complex was run on a 10% SDS-PAGE gel and stained with Coomassie blue. MW as follows: EZH2: 87 kDa. SUZ12: 83 kDa. EED: 50.2 kDa. RbAp46: 47.8 kDa. RbAp48: 47.7 kDa. Purity: > 90%

ADDITIONAL INFORMATION

Related Product Information for PRC2 recombinant protein

Short Description: Recombinant PRC2 complex that includes full-length EZH2, SUZ12, EED and RbAp46/48 (accession numbers NP_001190176.1, NP_056170, NP_003788.2, NP_002884.1, and NP_005601.1, respectively) was expressed in Sf9 and contains an N-terminal DYKDDDDK tag at the N-terminus of EZH2. The molecular weights of expressed EZH2, SUZ12, EED and RbAp46/48 are 87 kDa, 83 kDa, 50.2 kDa, 47.8 kDa and 47.7 kDa, respectively. PRC2 (Polycomb Repressive Complex 2) is one of the two classes Polycomb-group, or PcG proteins (the other being PRC1) that are important epigenetic determinants of stem cell identity. They play an important role in long-term epigenetic silencing of genes during cell fate determination and differentiation. PRC2 functions as a repressor of chromatin. PRC2 is required to target recruitment to specific DNA sequences (termed Polycomb Response Elements or PREs) of genomic regions to be silenced. Once associated with chromatin, the PRC2 subunit EZH2 has histone methyltransferase activity that catalyzes the trimethylation of histone H3 at lysine 27. H3K27me3 is well established as a hallmark of regions of repressed chromatin. Trimethylation of lysine 27 leads to the recruitment of PRC1 through the binding of H3K27me3 by chromodomain-containing proteins in PRC1. PRC1 is responsible for long-term gene silencing after cellular differentiation. PRC2 complex can be used for enzyme kinetics and inhibitor screening studies.

Background: PRC2 (Polycomb Repressive Complex 2) is one of the two classes Polycomb-group, or PcG proteins (the other being PRC1) that are important epigenetic determinants of stem cell identity. They play an important role in long-term epigenetic silencing of genes during cell fate determination and differentiation. PRC2 functions as a repressor of chromatin. PRC2 is required to target recruitment to specific DNA sequences (termed Polycomb Response Elements or PREs) of genomic regions to be silenced. Once associated with chromatin, the PRC2 subunit EZH2 has histone methyltransferase activity that catalyzes the trimethylation of histone H3 at lysine 27. H3K27me3 is well established as a hallmark of regions of repressed chromatin. Trimethylation of lysine 27 leads to the recruitment of PRC1 through the binding of H3K27me3 by chromodomain-containing proteins in PRC1. PRC1 is responsible for long-term gene silencing after cellular differentiation.

Product Categories/Family for PRC2 recombinant protein

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

NCBI AND UNIPROT INFORMATION

NCBI GI #	322506097
NCBI GeneID	2146
NCBI Accession #	NP_001190176.1 ; NP_056170 ; NP_003788.2 ; NP_002884.1 ; and NP_005601.1
NCBI GenBank Nucleotide #	NM_001203247.1
UniProt Accession #	Q15910 ; Q15755 ; Q75MG3 ; Q92857 ; Q96FI6 ; B2RAQ1 ; B3KS30 ; B7Z1D6 ; B7Z7L6
Molecular Weight	746
NCBI Official Full Name	histone-lysine N-methyltransferase EZH2 isoform c
NCBI Official Synonym Full Names	enhancer of zeste homolog 2 (Drosophila)

NCBI Official Symbol	EZH2
NCBI Official Synonym Symbols	WVS; ENX1; EZH1; KMT6; WVS2; ENX-1; EZH2b; KMT6A
NCBI Protein Information	histone-lysine N-methyltransferase EZH2; lysine N-methyltransferase 6
UniProt Protein Name	Histone-lysine N-methyltransferase EZH2
UniProt Gene Name	EZH2
UniProt Synonym Gene Names	KMT6
UniProt Entry Name	EZH2_HUMAN

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/ezh2-recombinant-protein-baculovirus/59652>