

Product datasheet

Recombinant human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 protein ab198146

2 Images

Description

Product name	Recombinant human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 protein
Biological activity	0.04 pmol/min/μg
Purity	> 96 % SDS-PAGE.
Expression system	Baculovirus
Accession	Q15910 O75530 Q15022 Q6ZN18-2 Q09028
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Amino Acid Sequence 1	
Species	Human
Predicted molecular weight	86 kDa including tags
Amino acids	2 to 746
Tags	His tag N-Terminus
Amino Acid Sequence 2	
Species	Human
Predicted molecular weight	51 kDa including tags
Amino acids	2 to 441
Tags	DDDDK tag N-Terminus
Amino Acid Sequence 3	
Species	Human
Predicted molecular weight	87 kDa including tags
Amino acids	2 to 739
Tags	His tag N-Terminus

Amino Acid Sequence 4

Species	Human
Predicted molecular weight	53 kDa including tags
Amino acids	2 to 503
Tags	His tag N-Terminus

Amino Acid Sequence 5

Species	Human
Predicted molecular weight	48 kDa including tags
Amino acids	2 to 425
Tags	His tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab198146** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Preservative: 1.36% Imidazole Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

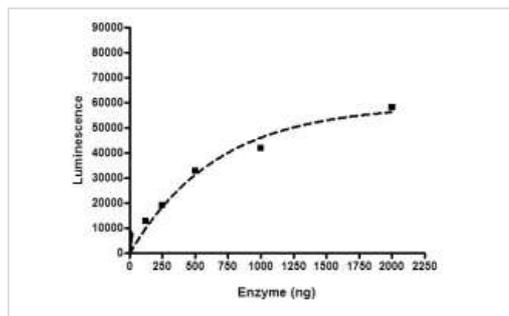
Relevance	EED: Polycomb group (PcG) protein. Component of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' and 'Lys-27' of histone H3, leading to transcriptional repression of the affected target gene. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1 and CDKN2A. RBBP4: Core histone-binding subunit that may target chromatin assembly factors, chromatin remodeling factors and histone deacetylases to their histone substrates in a manner that is regulated by nucleosomal DNA. Component of several complexes which regulate chromatin metabolism. These include the chromatin assembly factor 1 (CAF-1) complex, which is required for chromatin assembly following DNA replication and DNA repair; the core histone deacetylase (HDAC) complex, which promotes histone deacetylation and consequent transcriptional repression; the nucleosome remodeling and histone deacetylase complex (the NuRD complex), which promotes transcriptional repression by histone deacetylation and nucleosome remodeling; the PRC2/EED-EZH2 complex, which promotes repression of homeotic genes during development; and the NURF (nucleosome remodeling factor) complex. SUZ12: Polycomb group (PcG) protein. Component of the
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PRC2/EED-EZH2 complex, which methylates 'Lys-9' (H3K9me) and 'Lys-27' (H3K27me) of histone H3, leading to transcriptional repression of the affected target gene. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1 and CDKN2A. EZH2: Polycomb group (PcG) protein. Catalytic subunit of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' (H3K9me) and 'Lys-27' (H3K27me) 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. Compared to EZH2-containing complexes, it is more abundant in embryonic stem cells and plays a major role in forming H3K27me3, which is required for embryonic stem cell identity and proper differentiation. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1, CDKN2A and retinoic acid target genes. EZH2 can also methylate non-histone proteins such as the transcription factor GATA4. AEBP2: DNA-binding transcriptional repressor. May interact with and stimulate the activity of the PRC2 complex, which methylates 'Lys-9' and 'Lys-27' residues of histone H3.

Cellular localization

Chromosome Nucleus

Images



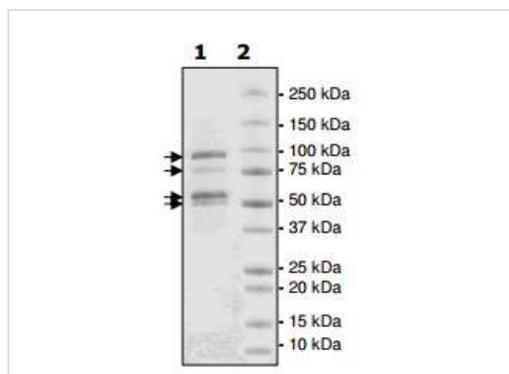
Functional Studies - Recombinant human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 protein (ab198146)

Specific activity of ab198146.

Assay conditions: 50 μ L reaction mix (20 mM phosphate buffer pH 7.4, 0.05% Tween-20, 20 μ M S-adenosylmethionine, and 50-200 ng enzyme complex) add to the wells coated with the substrate.

Incubate for 1 hour. Add antibody against methylated K27 residue of histone H3, incubate 1 hour. Then, add secondary HRP-labeled antibody and incubate 30 minutes. Finally, add HRP

chemiluminescent substrates and read luminescence.



SDS-PAGE - Recombinant human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 protein (ab198146)

4-20% gradient SDS-PAGE Coomassie staining.

Lane 1: 6.2 μ g ab198146 enzyme complex

Lane 2: Protein Marker

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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