

Product datasheet

Recombinant human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 (mutated A677G) protein ab198114

1 Image

Description

Product name	Recombinant human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 (mutated A677G) protein		
Biological activity	ab198114 is useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.		
Purity	>= 82 % SDS-PAGE. Affinity purified.		
Expression system	Baculovirus infected Sf9 cells		
Accession	<u>Q15910-2</u> <u>O75530</u> <u>Q15022</u> <u>Q6ZN18</u> <u>Q09028</u>		
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 751		
Modifications	mutated A677G		
Tags	His tag N-Terminus		
Additional sequence information	GenBank Accession No. NM_004456		
Amino Acid Sequence 2			
Species	Human		
Sequence	SEREVSTAPAGTDMPPAAKKQKLSSDENSNPDLSGDEND DAVSIESGTNTE RPDTPTNTPNAPGRKSWGKGKWKSKKCKYSFKCVNSLK EDHNQPLFGVQF NWHSKEGDPLVFATVGSNRVTLYECHSQGEIRLLQSYVD ADADENFYTCA WTYDSNTSHPLLAVAGSRGIIRIINPITMQCIKHYVGHGNAIN ELKFHPR		

DPNLLLSVSKDHALRLWNIQDTLVAIFGGVEGHRDEVLS
 ADYDLLGEKI
 MSCGMDHSLKLWRINSKRMMNAIKESYDYNPNKTNRPFIS
 QKIHFPDFST
 RDIHRNYDCVRWLGDLLSKSCENAIVCWKPGKMEDDID
 KIKPSESNT
 ILGRFDYSQCDWYMRFSMDFWQKMLALGNQVGKLYVWD
 LEVEDPHKAKC
 TTLTHHKCGAAIRQTSFSRDSSILIAVCDDASMRWDRLR

Predicted molecular weight 51 kDa including tags
Amino acids 2 to 441
Tags DDDDK tag N-Terminus
Additional sequence information EED, GenBank Accession No. NM_003797
Amino Acid Sequence 3

Species Human

Sequence APQKHGGGGGGSGPSAGSGGGGFGGSAAVAAATASG
 GKSGGGSCGGGGS
 YSASSSSSAAAAAGAAVLPVKKPKMEHVQADHELFLQAF
 EKPTQMYRFLR
 TRNLIAPIFLHRTLTYMSHRNSRTNIKRKTFKVDDMLSKVEK
 MKGEQESH
 SLSAHLQLTFTGFFHKNDKPSNSENEQNSVTLEVLLVKV
 CHKKRKDVSC
 PIRQVPTGKKQVPLNPDNLNQTGPGNFPPLAVSSNEFEPS
 NSHMVKSYSL
 FRVTRPGRREFNGMINGETNENIDVNEELPARRKRNRDGG
 EKTFVAQMTV
 FDKNRRLQLLDGEYEVAMQEMEECPISSKRATWETILDGK
 RLPPFETFSQ
 GPTLQFTLRWTGETNDKSTAPIAKPLATRNSESLHQENKP
 GSVKPTQTIA
 VKESLTDDLQTRKEKDTNENRQKLIFYQFLYNNNTRQQT
 EARDLHCP
 WCTLNCRKLYSLLKHLKLCHSRFIFNYVYHPKGARIDVSINE
 CYDGSYAG
 NPQDIHRQPGFAFSRNGPVKRTPIHILVCRPKRTKASMSE
 FLESEDGEV
 EQQRTYSSGHNRLYFHSDTCLPLRPQEMEVDSEDEKDPE
 WLREKTITQE
 EFSDVNEGEKEVMKLWNLHVMKHGFIADNQMNHACMLF
 VENYGQKIKKN
 LCRNFMLHLVSMHDFNLISIMSIDKAVTKLREMQQKLEKGE
 SASPANEEI
 TEEQNGTANGFSEINSKEKALETDSVSGVSKQSKKQKL

Predicted molecular weight 87 kDa including tags
Amino acids 2 to 739
Tags His tag N-Terminus
Additional sequence information SUZ12, GenBank Accession No. NM_015355

Amino Acid Sequence 4

Species

Human

Sequence

AAAITDMADLEELSRLSPLPPGSPGSAARGRAEPPEEEEE
EEEEEEEEAEAE
EAVAALLLNGGSGGGGGGGGGVGGGEAETMSEPSPE
SASQAGEDEDEEE
DDEEEDESSSSGGGEEESSAESLVGSSGGSSSDETRS
LSPGAASSSSGD
GDGKEGLEEPKGPGRSQGGGGGGSSSSSVSSGGDEG
YGTGGGGSSATSG
GRRGSLEMSSDGEPLSRMDESDSISSTIMDV DSTISSGRS
TPAMMNGQGS
TTSSSKNIAYNCCWDQCQACFNSSPDLADHIRSIHVDGQR
GGV FVCLWKG
CKVYNT PSTSQSWLQRHMLTHSGDKPFCVVG GCNASF
ASQGGLARHVPT
HFSQQNSSKVSSQPKAKEESPSKAGMKNRRKLKNKRRR
SLPRPHDFFDAQ
TLDAIRHRAICFNLSAHIESLGKGHSVVFHSTVIARKEDSG
KIKLLLHW
MPEDILPDVWVNESERHQLKTKVVHLSKLPKDTALLDPN
YRTMPQKRL KRTLIRKVFNL YLSKQ

Predicted molecular weight

53 kDa including tags

Amino acids

2 to 517

Tags

His tag N-Terminus

Additional sequence information

AEBP2, GenBank Accession No. NM_153207

Amino Acid Sequence 5

Species

Human

Sequence

ADKEAAFDDAVEERVINEEYKIWKKNTPFLYDLVMTHALE
WPSLTAQWLP
DVTRPEGKDFSIHRLVLGTHTSDEQNHLVIASVQLPNDDA
QFDASHYDSE
KGEFGGFGSVSGKIEIEIKINHEGEVNRARYMPQNPCIATK
TPSSDVLV
FDYTKHPSKPDPSGECNPDLRLRGHQKEGYGLSWNP NL
SGHLLSASDDHT
ICLWDISAVPKEGKVVD AKTIFTGHTAVVEDVSWHLLHES
LFGSVADDQK
LMIWDTRSNNTSKPSHSVDAHTAEVNCLSFNPYSEFILAT
GSADKTVALW
DLRNLKLKLHSFESHKDEIFQVQWSPHNETILASSGTDRR
LNVWDL SKIG
EEQSPEDAEDGPPELLFIHGGHTAKISDFSWNPNEPWVIC
SVSEDNIMQV WQMAENYNDEDPEGSDPEGQGS

Predicted molecular weight

48 kDa including tags

Amino acids

2 to 425

Tags

His tag N-Terminus

Additional sequence information RBBP4, GenBank Accession No. NM_005610

Specifications

Our **Abpromise guarantee** covers the use of **ab198114** in the following tested applications.

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

Applications	SDS-PAGE
	Functional Studies
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.
	pH: 8.00
	Preservative: 0.14% Imidazole
	Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol (glycerin, glycerine)
	This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

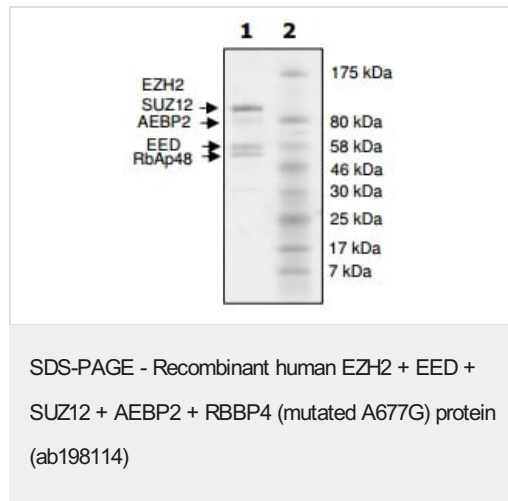
Relevance	<p>EED: Polycomb group (PcG) protein. Component of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' and 'Lys-27' of histone H3, leading to transcriptional repression of the affected target gene. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, 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 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</p>
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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



4-20% SDS-PAGE analysis of ab198114.

Lane 1: 3.16 µg ab198114 enzyme complex

Lane 2: Protein marker

Stained with Coomassie blue.

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