

Product datasheet

Recombinant Human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 protein ab198132

[1 Image](#)

Description

Product name Recombinant Human EZH2 + EED + SUZ12 + AEBP2 + RBBP4 protein

Purity >= 93 % SDS-PAGE.
Affinity purified.

Expression system Baculovirus infected Sf9 cells

Accession [Q15910-2](#)
[O75530](#)
[Q15022](#)
[Q6ZN18-2](#)
[Q09028](#)

Protein length Full length protein

Animal free No

Nature Recombinant

Amino Acid Sequence 1

Species Human

Sequence GQTGKKSEKGPVCWRKRVKSEYMRLRQLKRFRRADEVK
SMFSSNRQKILE
RTEILNQEWKQRRIQPVHILTSVSSLRGTRECSVTSDLDFP
TQVIPLKTL
NAVASVPIMYSWSPLQQNFMVEDETVLHNIPYMGDEVLD
QDGTFFIEELIK
NYDGKVHGDRECGFINDEIFVELVNALGQYND D D D D D D D D G
DDPEEREKQK
DLEDHRDDKESRPPRKFPSPDKIFEAISSMFPDKGTAEELK
EKYKELTEQQ
LPGALPPECTPNIDGPNKSVQREQLHSFHTLFCRRCFK
YDCFLHRKCN
YSFHATPNTYKRKNTETALDNKPCGPQCYQHLEGAKEFA
AALTAERIKTP
PKRPGGRRRGRLPNSSSRPSTPTINVLESKDTSDSREAG
TETGGENNDKE
EEEEKDETSSSSEANSRCQTPIKMKPNIEPPENVEWSGA
EASMFVRVIGTY

YDNFCAIARLIGTKCRQVYEFVRVKESSIAPAPAEDVDTPP
 RKKKRKHR
 LWAAHCRKIQLKKDGSSNHVYNYQPCDHPRQPCDSSCP
 CVIAQNFCEKFC
 QCSSECQNRFPGCRCKAQCNKQCPCYLAVRECDPDLG
 LTCGAADHWDSK
 NVSCKNCSIQRGSKKHLLAPSDVAGWGIFIKDPVQKNEFI
 SENCGEIIS
 QDEADRRGKVYDKYMCSFLFNLNDFVVDATRKGKIRF
 ANHSVNPNCYA
 KVMMVNGDHRIGIFAKRAIQTGEELFFDYRYSQADALKYVG
 IEREMEIP

Predicted molecular weight 86 kDa including tags

Amino acids 2 to 751

Modifications mutated Y646N

Tags His tag N-Terminus

Additional sequence information EZH2; NM_004456. [This mutation is often cited as Y641N in variant 3 (GenBank Accession No. NM_001203247)].

Amino Acid Sequence 2

Species Human

Sequence

SEREVSTAPAGTDMPPAAKKQKLSSDENSNPDLSGDEND
 DAVSIESGTNTE
 RPDTPTNTPNAPGRKSWGKWKWSKCKYKFCVNSLK
 EDHNQPLFGVQF
 NWHSKEGDPLVFATVGSNRVTLYECHSQGEIRLLQSYVD
 ADADENFYTCA
 WTYDSNTSHPLLAVAGSRGIIRIINPITMQCIKHVGHGNAIN
 ELKFHPR
 DPNLLLSVSKDHALRLWNIQTDLVAIFGGVEGHRDEVLS
 ADYDLLGEKI
 MSCGMDHSLKLWRINSKRMMNAIKESYDYNPNKTNRPFIS
 QKIHFPDFST
 RDIHRNYDCVRWLGLLILSKSCENAMCWKPGKMEDDID
 KIKPSESNT
 ILGRFDYSQCDWYMRFSMDFWQKMLALGNQVGLYVWD
 LEVEDPHKAKC TTLTHHKCGAAIRQTSFSRD
 SSILIAVCDDASIRWDRLR

Predicted molecular weight 51 kDa including tags

Amino acids 2 to 441

Tags DDDDK tag N-Terminus

Additional sequence information EED; NM_003797.

Amino Acid Sequence 3

Species Human

Sequence

APQKHGGGGGGGSGPSAGSGGGGFGGSAAVAAATASG
 GKSGGGSCGGGGG
 YSASSSSSAAAAAAGAAVLPVKKPKMEHVQADHELFLQAF
 EKPTQIYRFLR

TRNLIPIFLHRTLTYMSHRNSRTNIKRKTFKVDDMLSKEK
 MKGEQESH
 SLSAHLQLTFTGFFHKNDKPSNSENEQNSVTLEVLLVKV
 CHKKRKDVSC
 PIRQVPTGKKQVPLNPDLNQTKPGNFPSLAVSSNEFEP
 NSHMVKSYSLL
 FRVTRPGRREFNGMINGETNENIDVNEELPARRKRNREDG
 EKTFVAQMTV
 FDKNRRLQLLDGEYEVAMQEMEECPISKKRATWETILDGK
 RLPPFETFSSQ
 GPTLQFTLRWTGETNDKSTAPIAKPLATRNSLHLENKP
 GSVKPTQTIA VKESLTTDLQTRKEKDPN
 ENRQKLRIFYQFLYNNNTRQQTEARDDLH
 CPWCTLNCRKLYSLLKHLKCHSRFIFNYVYHPKGARIDVS
 INECYDGSY
 AGNPQDIHRQPGFAFSRNGPVKRTPIHILVCRPKRTKAS
 MSEFLESEDG
 EVEQRTYSSGHNRLYFHSDTCLPLRPQEMEVDSEDEKD
 PEWLREKTTQ
 IEEFSDVNEGEKEVMKLWNLHVMKHGFIADNQMNHACML
 FVENYGQKIK
 KNLCRNFMHLVSMHDFNLISIMSIDKAVTKLREMQQKLEK
 GESASPANE
 EITEEQNGTANGFSEINSKEKALETDSVSGVSKQSKKQKL

Predicted molecular weight 87 kDa including tags

Amino acids 2 to 739

Tags His tag N-Terminus

Additional sequence information SUZ12; NM_015355.

Amino Acid Sequence 4

Species Human

Sequence

AAAITDMADLEELSRLSPLPPGSPGSAARGRAEPPPEEEE
 EEEEEEEEA
 EAVAALLLNNGSGGGGGGGGGVGGGEAETMSEPSPE
 SASQAGEDEDEEE
 DDEEEDESSSSGGGEEESSAESLVGSSGGSSSDETR
 LSPGAASSSSGD
 GDGKEGLEEPPKGRGSQGGGGGGSSSSSVSSGGDEG
 YGTGGGSSATSG
 GRRGSLEMSSDGEPLSRMDESDSISSTIMDV DSTISSGRS
 TPAMMNGQGS
 TTSSSKNIAYNCCWDQCQACFNSSPDLADHIRSIHVDGQR
 GGVFVCLWKG
 CKVYNTPSTSQSWLQRHMLTHSGDKPFKCVVGGCNASF
 ASQGGLARHVPT
 HFSQQNSSKVSSQPKAKEESPSKAGMNRKRLKNKRRR
 SLPRPHDFFDAQ
 TLDAIRHRAICFNLSAHIESLGKGHSVVFHSTVIARKEDSG
 KIKLLLHW
 MPEDILPDVWVNESERHQLKTKVVHLSKLPKDTALLDPN

YRTMPQKRL KR

Predicted molecular weight 53 kDa including tags
Amino acids 2 to 503
Tags His tag N-Terminus
Additional sequence information AEBP2; NM_153207.

Amino Acid Sequence 5

Species Human

Sequence

ADKEAAFDDAVEERVINEEYKIWKKNTPFLYDLVMTHALE
WPSLTAQWLP
DVTRPEGKDFSIHRLVLGTHTSDEQNHLVIASVQLPNDDA
QFDASHYDSE
KGEFGGFGSVSGKIEIEIKINHEGEVNRARYMPQNPCIATK
TPSSDVLV
FDYTKHPSKPDPSGECNPDLRLRGHQKEGYGLSWNPNL
SGHLLSASDDHT
ICLWDISAVPKEGKVVDAAKTIFTGHTAVVEDVSWHLLHES
LFGSVADDQK
LMWDRSNNTSKPSHSVDAHTAEVNCLSFNPYSEFILAT
GSADKTVALW
DLRNLKLLKLSFESHKDEIFQVQWSPHNETILASSGTD RR
LNVWDL SKIG
EEQSPEDAEDGPPELLFIHGGHTAKISDFSWNPNEPWVIC
SVSEDNIMQV WQMAENIYNDEDPEGSVDPEGQGS

Predicted molecular weight 48 kDa including tags
Amino acids 2 to 425
Tags His tag N-Terminus
Additional sequence information RBBP4; NM_005610.

Specifications

Our **Abpromise guarantee** covers the use of **ab198132** 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

Form Liquid

Additional notes Mutant version of EZH2 5-member complex but with a Tyr-to-Asn mutation on aa646 of the EZH2 protein. Complex of Human EZH2 (NM_004456), aa2-end, Y646N*, with N terminal His tag, MW= 86 kDa, Human EED (NM_003797), aa2-end with N terminal DDDDK tag, MW= 51 kDa, Human SUZ12 (NM_015355), aa2-end with N terminal His tag, MW = 87 kDa, Human AEBP2 (NM_153207), aa2- end with N terminal His tag, MW = 53 kDa, and Human RBBP4 (NM_005610), aa2-end with N terminal His tag, MW = 48 kDa, co-expressed in a baculovirus expression system.

Preparation and Storage

Stability and Storage Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol (glycerin, glycerine)

Contains 80 ng/μl DDDDK peptide.

General Info

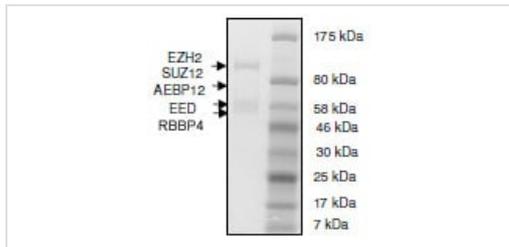
Relevance

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 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



4-20% SDS-PAGE analysis of ab198132 (1.7µg complex).

SDS-PAGE - Recombinant Human EZH2 + EED +
SUZ12 + AEBP2 + RBBP4 protein (ab198132)

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