EZH2 (Y641N) /EED/SUZ12/RbAp48/AEBP2, His-Tag, FLAG-Tag Recombinant

Product Information

Description:	Mutant version of the EZH2 5-member complex (BPS Bioscience #51004), with a Tyr-to-
	Asn mutation on amino acid 646 of the EZH2 protein. Complex of human EZH2
	(enhancer of zeste homolog 2), amino acids 2-end, Y646N*, with N-terminal His-tag,
	human EED (embryonic ectoderm development), amino acids 2-441 (end) with N-
	terminal FLAG-tag, human SUZ12, amino acids 2-503 (end) with N-terminal His-tag.
	human AEBP2 (adipocyte enhancer-binding protein), amino acids 2-739 (end) with N-
	terminal His-tag, and human RhAn48 (retinohlastoma hinding protein 4) amino acids
	2-end with N-terminal His-tag co-expressed in a baculovirus expression system. The
	complex was affinity nurified
Background:	F7H2 (enhancer of zeste homolog 2) is the catalytic subunit of the PRC2 (nolycomb
BackBround	repressive complex 2)/FED-F7H2 complex which methylates Lys9 (H3K9me) and Lys27
	(H3K27me) of historie H3 leading to transcriptional repression of the affected target
	gene Able to mono- di- and trimethylate Lys27 of historie H3 to form H3K27me1
	H3K27me2 and H3K27me3 respectively. It is abundant in embryonic stem cells and
	nlavs a major role in forming H3K27me3, which is required for embryonic stem cells
	identity and proper differentiation. The PRC2/FED_F7H2 complex may also serve as a
	recruiting platform for DNA methyltransferases thereby linking two enigenetic
	repression systems. Genes repressed by the PRC2/FED-F7H2 complex include HOXC8
	HOXA9 MYT1 CDKN2A and retinoic acid target genes F7H2 can also methylate non-
	histone proteins such as the transcription factor GATAA
Spacias	
Construct:	F7H2 (Y6A1N) (His-2-746(end)) / FED (FLAG-2-441(end)) / SU712 (His-1-739(end)) /
construct.	$Bh\Delta n48$ (His-1-503(end)) / $\Delta EBP2$ (His-2-425(end))
Mutation:	F7H2: Y641N
Concentration:	1.04 mg/ml
Expression System:	Sf9
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	40 mM Tris, pH 8.0, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	EZH2: 87 kDa; EED: 51 kDa; SUZ12: 88 kDa; AEBP2: 54 kDa; RbAP48: 48 kDa
Genbank Accession:	EZH2: NM_004456; EED: NM_003797, SUZ12: NM_015355; AEBP2: NM_153207;
	RbAP48: NM_005610
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before
	opening. Aliquot into small volumes and flash freeze for long term storage. Avoid
	multiple freeze/thaw cycles.
Assay Conditions:	Assay done according to EZH2 (Y641N) TR-FRET Assay Kit (BPS Bioscience #52078) with
	EZH2 (Y641N) titrated at various concentrations.
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.



EZH2 (Y641N) /EED/SUZ12/RbAp48/AEBP2, His-Tag, FLAG-Tag Recombinant

Quality Control Data



