

PHF8 recombinant protein

Recombinant PHF8 protein

CATALOG # AAA59682	HOST Baculovirus
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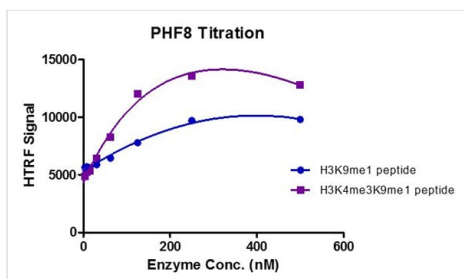
PRODUCT SYNONYMS

PHF8; Recombinant PHF8 protein; JHDM1F; MRXSSD; ZNF422; PHF8 recombinant protein

PRODUCT SPECIFICATIONS

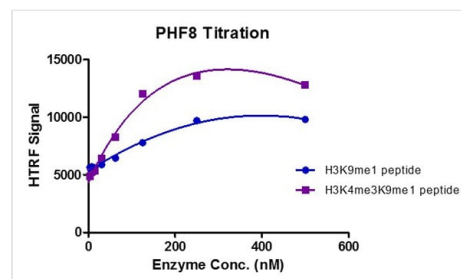
Host	Baculovirus
Form/Format	Recombinant PHF8 protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 5% glycerol, 0.04% Triton X-100, 0.2mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant PHF8 is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Histone Demethylase Assay Conditions: 1uM H3K9me1 or H3K4me3K9me1 peptide was incubated with different concentrations of recombinant PHF8 protein in reaction buffer containing 50mM HEPES-NaOH pH 7.5, 50uM 2OG, 50uM Ascorbate, 25uM (NH4)2Fe(SO4)2·6H2O, 1mM TCEP for 1 hour at room temperature. HTRF reaction was used for detection.
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



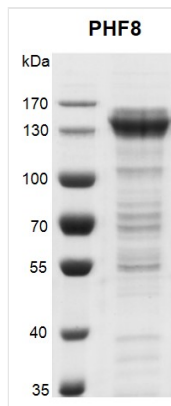
Application Data

HTRF assay for Recombinant PHF8 protein activity. 1 uM H3K4me3K9me1 peptide was incubated with PHF8 / KDM7B protein in reaction buffer for 1 hour at room temperature. Anti-H3K9me0 antibody was used to detect reaction product.



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SDS-PAGE

Recombinant PHF8 protein gel. PHF8 protein was run on a 8% SDS-PAGE gel and stained with Coomassie Blue. MW: 121.1 kDa Purity: > 70%

ADDITIONAL INFORMATION

Related Product Information for PHF8 recombinant protein	Short Description: Recombinant PHF8 (accession number NP_055922.1) was expressed in Sf9 and contains an N-terminal DYKDDDDK tag with a molecular weight of 121.1 kDa. PHF8 (PHD finger protein 8), also known as Lysine (K)-specific demethylase 7B (KDM7B) and JmjC domain-containing histone demethylation protein 1D-B (JHDM1DB), is a member of the JmjC-containing (Jumonji-C) class of histone demethylase proteins that are involved in the regulation of genome function through the removal of methyl groups from histones. PHF8 has two N-terminal domains, a PHD finger that binds trimethylated lysine 4 of histone H3 (H3K4me3) and a Jumonji domain that demethylates monomethylated H3 Lys9 (H3K9me1), Histone H3 dimethyl Lys9 (H3K9me2), Histone H3 dimethyl Lys27 (H3K27me2)(which are all modifications associated with transcriptional repression) and also Histone H3 dimethyl Lys36 (H3K36me2). PHF8 depletion in mammalian neuronal cells results in decreased expression of follistatin and increased methylation of H3K9 and H3K27. It has also been suggested to function in gene silencing during brain development. Recombinant PHF8 can be used for enzyme kinetics and inhibitor screening studies. Background: PHF8 (PHD finger protein 8), also known as Lysine (K)-specific demethylase 7B (KDM7B) and JmjC domain-containing histone demethylation protein 1D-B (JHDM1DB), is a member of the JmjC-containing (Jumonji-C) class of histone demethylase proteins that are involved in the regulation of genome function through the removal of methyl groups from histones. PHF8 has two N-terminal domains, a PHD finger that binds trimethylated lysine 4 of histone H3 (H3K4me3) and a Jumonji domain that demethylates monomethylated H3 Lys9 (H3K9me1), Histone H3 dimethyl Lys9 (H3K9me2), Histone H3 dimethyl Lys27 (H3K27me2)(which are all modifications associated with transcriptional repression) and also Histone H3 dimethyl Lys36 (H3K36me2). PHF8 depletion in mammalian neuronal cells results in decreased expression of follistatin and increased methylation of H3K9 and H3K27. It has also been suggested to function in gene silencing during brain development.
Product Categories/Family for PHF8 recombinant protein	Recombinant Proteins; Histone Demethylase (HDM)
References	This product has been used in the following publication(s):ulicna, et. al. Biochim Biophys Acta. 2018 Mar;1863(3):266-275.

NCBI AND UNIPROT INFORMATION

NCBI GI #	32698700
NCBI GeneID	23133
NCBI Accession #	NP_055922.1
NCBI GenBank Nucleotide #	NM_015107
UniProt Accession #	Q9UPP1 ; Q5H9U5 ; Q5JPR9 ; Q5JPS0 ; Q5JPS2 ; Q5JPS3 ; Q5VUJ4 ; Q7Z6D4 ; Q9HAH2 ; B3KMOV ; B7Z911
Molecular Weight	98,290 Da
NCBI Official Full Name	histone lysine demethylase PHF8 isoform 2

NCBI Official Synonym Full Names	PHD finger protein 8
NCBI Official Symbol	PHF8
NCBI Official Synonym Symbols	KDM7B; JHDM1F; MRXSSD; ZNF422
NCBI Protein Information	histone lysine demethylase PHF8
UniProt Protein Name	Histone lysine demethylase PHF8
UniProt Gene Name	PHF8
UniProt Synonym Gene Names	KIAA1111; ZNF422

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/phf8-recombinant-protein-baculovirus/59682>