

METTL3/METTL14 recombinant protein

Recombinant METTL3/METTL14 complex

CATALOG #
AAA59755

HOST
Baculovirus

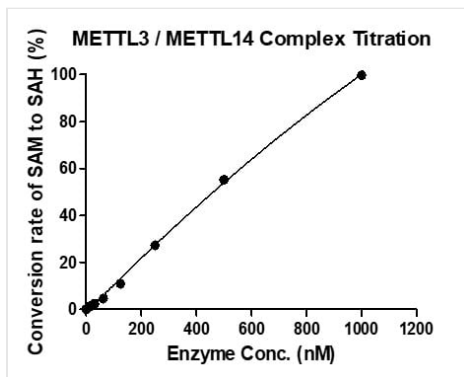
PRODUCT SYNONYMS

METTL3/METTL14; Recombinant METTL3/METTL14 complex; Methyltransferase Like 3; MRNA M(6)A Methyltransferase; N6-Adenosine-Methyltransferase; METTL3/METTL14 recombinant protein

PRODUCT SPECIFICATIONS

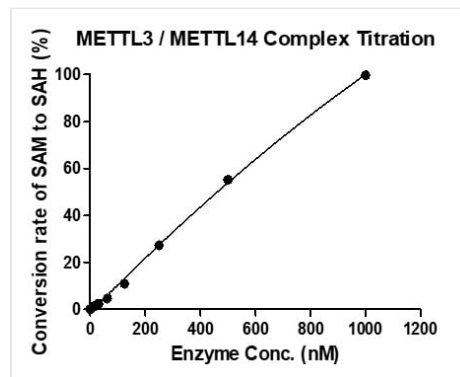
Host	Baculovirus
Form/Format	Recombinant METTL3/METTL14 complex is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
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



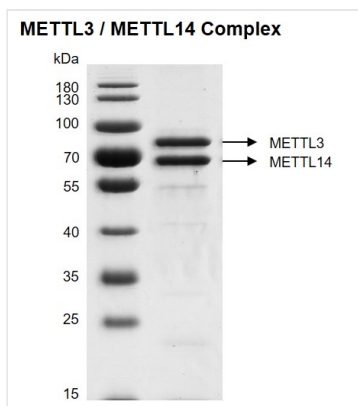
Application Data

MTase-Glo assay for METTL3 / METTL14 Complex m6A methyltransferase activity 1 ?M Substrate RNA (UAGAGGACCAGUCGGACCAGUCGGACCGAU) and 1 ?M SAM was incubated with different concentrations of METTL3 / METTL14 Complex in an 8 ul reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, and 1 mM TCEP at room temperature for 1 hour. 5xMTase-Glo Reagent was added to the products and incubated for 30 min, then MTase-Glo Detection was added and luminescence were read after another 30 min incubation. SAH standard curve (0-1 uM) was performed following the same protocol.



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SDS-PAGE

Recombinant METTL3 / METTL14 complex, protein gel. Recombinant METTL3 / METTL14 complex was run on a 10% SDS-PAGE gel and stained with Coomassie Blue. MW: METTL3: 64.5 kDa, MW: METTL14, N-DYKDDDDK: 53.3 kDa. Purity: >85%

ADDITIONAL INFORMATION

Related Product Information for METTL3/METTL14 recombinant protein	Short Description: Recombinant METTL3/METTL14 complex that includes full-length human METTL3 (accession number NP_062826.2) without tag and full-length METTL14 protein (accession number NP_066012.1) with an N-terminal DYKDDDDK-Tag was expressed in Sf9 cells. The molecular weights of METTL3 and METTL14 are 64.5 kDa and 53.3 kDa, respectively. It is suitable for analysis of RNA methylation and modification, RNA splicing, processing and transcription regulation assays.
	Background: N6-methylated adenine (m6A) is prevalently present in nearly all RNA types and can be found in all organisms from bacteria to humans. It preferentially appears around stop codons and within long internal exons in mammalian messenger RNAs. m6A plays an important role in the efficiency of mRNA splicing, processing, translation efficiency, editing and mRNA stability. m6A also takes place in other RNA molecules, such as primary miRNA (pri-miRNAs). In mammalian cells, METTL3 (methyltransferase-like 3, also known as IME4, M6A, MT-A70) and METTL14 (methyltransferase-like 14) are two m6A methyltransferases reported to date, which both contain methyltransferase domains. These two proteins form a stable heterodimer core complex of METTL3-METTL14 that functions in cellular m6A deposition on mammalian nuclear RNAs. METTL3 is the catalytically active subunit, while METTL14 plays a structural role critical for substrate recognition.
Product Categories/Family for METTL3/METTL14 recombinant protein	Recombinant Proteins ; Transcription

NCBI AND UNIPROT INFORMATION

NCBI GI #	21361827
NCBI GeneID	56339
NCBI Accession #	NP_062826.2 ; NP_066012.1
NCBI GenBank Nucleotide #	NM_019852.3
UniProt Accession #	Q86U44 ; O14736 ; Q86V05 ; Q9HB32
Molecular Weight	25,479 Da
NCBI Official Full Name	N6-adenosine-methyltransferase 70 kDa subunit
NCBI Official Synonym Full Names	methyltransferase like 3
NCBI Official Symbol	METTL3
NCBI Official Synonym Symbols	M6A; IME4; Spo8; MT-A70
NCBI Protein Information	N6-adenosine-methyltransferase 70 kDa subunit; mRNA m(6)A methyltransferase; methyltransferase-like protein 3; adoMet-binding subunit of the human mRNA (N6-adenosine)-methyltransferase

UniProt Protein Name	N6-adenosine-methyltransferase 70 kDa subunit
UniProt Gene Name	METTL3
UniProt Synonym Gene Names	MTA70; MT-A70
UniProt Entry Name	MTA70_HUMAN

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://www.aaabiotech.com/mettl3-recombinant-protein-baculovirus/59755>