

Recombinant METTL16 protein

Catalog No: 81085, 81785

Lot No: 31017001

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.3 µg/µl

Source: Human

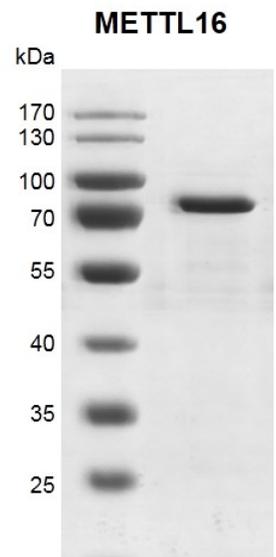
Buffer Contents: Recombinant METTL16 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

Background: METTL16 (Methyltransferase-like protein 16), also known as U6 small nuclear RNA (adenine-(43)-N(6))-methyltransferase or METT10D (Methyltransferase 10 Domain-Containing Protein), is a RNA N6-methyltransferase that methylates adenosine residues of a subset of mRNAs and U6 small nuclear RNAs (U6 snRNAs). In contrast to the METTL3-METTL14 heterodimer, METTL16 is only able to methylate a limited number of RNAs: requires both a 5UACAGAGAA-3 nonamer sequence and a specific RNA structure. It also plays a key role in S-adenosyl-L-methionine homeostasis by regulating expression of MAT2A transcripts. In presence of S-adenosyl-L-methionine, METTL16 binds the 3-UTR region of MAT2A mRNA and specifically N6-methylates the first hairpin of MAT2A mRNA, leading to intron retention and preventing MAT2A mRNA splicing. While in S-adenosyl-L-methionine-limiting conditions, it binds the 3-UTR region of MAT2A mRNA but stalls due to the lack of a methyl donor, leading to stimulate splicing of the MAT2A retained intron, and promoting expression of MAT2A.

Protein Details: Recombinant human METTL16 protein was expressed in a baculovirus expression system as the full length protein (accession number NP_076991.3) with an N-terminal FLAG tag. The molecular weight of the protein is 64.9 kDa.

Application Notes: This protein is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



Recombinant METTL16 protein gel
10% SDS-PAGE Coomassie staining
MW: 64.9 kDa
Purity: >95%