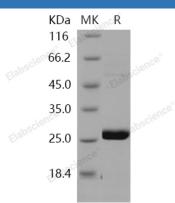
Recombinant Human METTL11A Protein

Catalog Number: PKSH031195

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human METTL11A protein Thr 2-Arg 223
Calculated MW	25.5 kDa
Observed MW	25.5 kDa
Accession	NP_054783.2
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 150mM NaCl, 10% glycerol, pH 7.5
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.





> 95 % as determined by reducing SDS-PAGE.

Background

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Methyltransferase-like protein 11A; also known as METTL11A; is a member of the methyltransferase superfamily and METTL11 family. Methyltransferase is a type of transferase enzyme which transfers a methyl group from a donor to an acceptor. Methylation often occurs on nucleic bases in DNA or amino acids in protein structures. Methytransferase uses a reactive methyl group bound to sulfur in S-adenosyl methionine (SAM) as the methyl donor. DNA methylation is often utilized to silence and regulate genes without changing the original DNA sequence. This methylation occurs on cytosine residues. DNA methylation may be necessary for normal growth from embryonic stages in mammals. Methylation can serve to protect DNA from enzymatic cleavage; since restriction enzymes are unable to bind and recognize externally modified sequences. This is especially useful in bacterial restriction modification systems which use restriction enzymes to cleave foreign DNA while keeping their own DNA protected by methylation. Methylation of amino acids in the formation of proteins leads to more diversity of possible amino acids and therefore more diversity of function. The methylation reaction occurs on nitrogen atoms either on the N terminus or side-chain position of the protein and are usually irreversible.