



# Recombinant Protein Technical Manual

## Recombinant Human METTL11A Protein

RPES2678

### Product Data:

**Product SKU:** RPES2678

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_054783.2

### Protein Information:

**Molecular Mass:** 25.5 kDa

**AP Molecular Mass:** 25.5 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** 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°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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** AD-003;C9orf32;HOMT1A;METTL11A;NRMT;NTM1A

## Immunogen Information:

**Sequence:** Thr 2-Arg 223

## Background:

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. Methyltransferase 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.