



Recombinant Protein Technical Manual

Recombinant Human NMNAT1/NMNAT Protein (His Tag)

RPE1536

Product Data:

Product SKU: RPE1536

Size: 10µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q9HAN9

Protein Information:

Molecular Mass: 33.3 kDa

AP Molecular Mass: 34 kDa

Tag: C-His

Bio-activity:

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

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, 500mM NaCl, 3mM DTT, 10% glycerol, pH 7.4

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

Application:

Synonyms: LCA9;NMNAT;PNAT1

Immunogen Information:

Sequence: Met 1-Thr 279

Background:

NMNAT, also known as NMNAT1, is a member of the Nicotinamide-nucleotide adenylyltransferases. It is widely expressed with high levels in skeletal muscle, heart, liver and kidney. NMNAT appears to have the ability to protect against axonal degeneration following mechanical or toxic insults. The coenzyme NAD and its derivatives are involved in hundreds of metabolic redox reactions and are utilized in protein ADP-ribosylation, histone deacetylation, and in some Ca^{2+} signaling pathways. NMNAT enzyme is vital for NAD biosynthesis, catalyzing the condensation of nicotinamide mononucleotide (NMN) or nicotinic acid mononucleotide (NaMN) with the AMP moiety of ATP to form NAD or NaAD.