Recombinant Protein Technical Manual

Recombinant Human NMNAT2/NMNAT-2 Protein (His Tag)

RPES1654

Product Data:

Product SKU: RPES1654

Size: 10µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q9BZQ4

Protein Information:

Molecular Mass: 35.8 kDa

AP Molecular Mass: 35 kDa

Tag: C-His

Bio-activity:

Purity: > 90 % 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, 5mM DTT, 10% glycerol, pH 8.0

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

Application:

Synonyms: C1orf15;PNAT2

Immunogen Information:

Sequence: Met 1-Gly307

Background:

NMNAT2, also known as NMNAT-2, belongs to the nicotinamide mononucleotide adenylyltransferase (NMNAT) enzyme family. NMNAT is a central enzyme in NAD+ biosynthesis, transferring the adenylyl moiety of ATP to nicotinamide mononucleotide (NMN) or nicotinic acid mononucleotide (NaMN) resulting in the formation of NAD+ or NaAD+ and the release of pyrophosphate. NMNAT2 is predominantly expressed in human pancreas, insulinoma as well as in the brain, especially in the cerebrum, cerebellum, occipital lobe, frontal lobe, temporal lobe and putamen. Immunofluorescence microscopy localized endogenous NMNAT2 to the Golgi apparatus in human cell line. Endogenous NMNAT2 seem to be a labile axon survival factor, because specific depletion of NMNAT2 is sufficient to induce Wallerian-like degeneration of uninjured axons which endogenous NMNAT1 and NMNAT3 cannot prevent. Thus endogenous NMNAT2 represents an exciting new therapeutic target for axonal disorders.