



Recombinant Protein Technical Manual

Recombinant Rat NPC2 Protein (His Tag)

RPES3257

Product Data:

Product SKU: RPES3257

Size: 20µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: CAD56199.1

Protein Information:

Molecular Mass: 15.9 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg protein 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 PBS, pH 7.4

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

Application:

Synonyms: re1 Niemann-Pick disease type C2;NPC2

Immunogen Information:

Sequence: Met1-Gly152

Background:

Niemann-Pick Type C2 (NPC2) plays an important role in the regulation of intracellular cholesterol homeostasis via direct binding with free cholesterol. NPC2 is an intralysosomal protein that binds cholesterol *in vitro*. NPC2 is a small lysosomal glycoprotein that binds cholesterol with submicromolar affinity. Deficiency in NPC2 is the cause of Niemann-Pick type C2 disease, a fatal neurovisceral disorder characterized by accumulation of cholesterol in lysosomes. Niemann-Pick disease, type C2 (NPC2) protein is one of the most abundant components of the epididymal fluid and contains a functional cholesterol-binding site that can transfer cholesterol between membranes, it has been suggested for years that NPC2 could be involved in the regulation of cholesterol levels in spermatozoa during epididymal maturation.