

## Recombinant Rat NPC2 Protein (His Tag)

Catalog No. PKSR030149

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

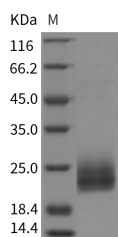
### Description

<b>Synonyms</b>	re1 Niemann-Pick disease type C2;NPC2
<b>Species</b>	Rat
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met1-Gly152
<b>Accession</b>	CAD56199.1
<b>Calculated Molecular Weight</b>	15.9 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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-

### For Research Use Only

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.