

## Recombinant Human NPC1 Protein (His & FLAG Tag)

Catalog No. PKSH030488

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

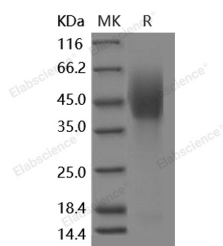
### Description

|                                    |                            |
|------------------------------------|----------------------------|
| <b>Synonyms</b>                    | NPC                        |
| <b>Species</b>                     | Human                      |
| <b>Expression Host</b>             | HEK293 Cells               |
| <b>Sequence</b>                    | Arg372-Phe622              |
| <b>Accession</b>                   | NP_000262.2                |
| <b>Calculated Molecular Weight</b> | 32.0 kDa                   |
| <b>Tag</b>                         | N-His-Flag                 |
| <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<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>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 C1 (NPC1), a host receptor involved in the envelope glycoprotein (GP)-mediated entry of filoviruses into cells, is believed to be a major determinant of cell susceptibility to filovirus infection. Niemann-Pick C1 (NPC1), a membrane protein of lysosomes, is required for the export of cholesterol derived from receptor-mediated endocytosis of

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LDL. The NPC1 protein is a multipass transmembrane protein whose deficiency causes the autosomal recessive lipid storage disorder Niemann-Pick type C1. NPC1 localizes predominantly to late endosomes and has a dileucine motif located within a small cytoplasmic tail thought to target the protein to this location. Niemann-Pick disease Type C1 (NPC1) is a rare progressive neurodegenerative disorder caused by mutations in the NPC1 gene. On the cellular level NPC1 mutations lead to an accumulation of cholesterol and gangliosides.