

## Recombinant Human CANT1 Protein (Fc Tag)

**Catalog Number: PKSH030724**

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

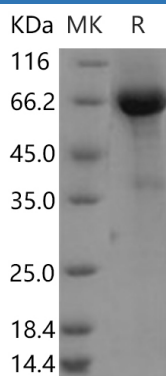
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human CANT1 protein Gly80-Ile401, with an N-terminal hFc
<b>Calculated MW</b>	64.3 kDa
<b>Observed MW</b>	65 kDa
<b>Accession</b>	Q8WWQ1-1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 90 % 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% Tween 80 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



> 90 % as determined by reducing SDS-PAGE.

### Background

CANT1 (calcium activated nucleotidase 1) belongs to the apyrase family. Apyrase is a calcium-activated plasma membrane-bound enzyme (magnesium can also activate it) (EC 3.6.1.5) that catalyses the hydrolysis of ATP to yield AMP and inorganic phosphate. Two isoenzymes are found in commercial preparations from *S. tuberosum*. One with a higher ratio of substrate selectivity for ATP: ADP and another with no selectivity. It can also act on ADP and other nucleoside triphosphates and diphosphates with the general reaction being  $NTP \rightarrow NDP + Pi$  or  $NMP + 2Pi$ . The salivary apyrases of blood-feeding arthropods are nucleotide hydrolysing enzymes are implicated in the inhibition of host platelet aggregation through the hydrolysis of extracellular adenosine diphosphate. CANT1 functions as a calcium-dependent nucleotidase with a preference for UDP. Defects in CANT1 are the cause of desbuquois dysplasia.

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