

## Recombinant Human PTPN12 Protein

Catalog No. PKSH031088

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

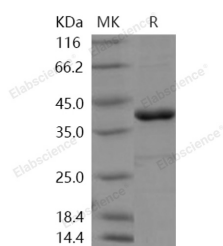
### Description

<b>Synonyms</b>	PTP-PEST;PTPG1
<b>Species</b>	Human
<b>Expression Host</b>	Baculovirus-Insect Cells
<b>Sequence</b>	Met 1-Gln355
<b>Accession</b>	AAA36529.1
<b>Calculated Molecular Weight</b>	41.8 kDa
<b>Observed molecular weight</b>	41 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Measured by its ability to dephosphorylate a tyrosine residue in a peptide containing the EGFR Y992 phosphorylation site. The specific activity is > 20μmol/min/mg

### Properties

<b>Purity</b>	> 85 % 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 20mM Tris, 500mM NaCl, 10% glycerol, pH 8.0 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



> 85 % as determined by reducing SDS-PAGE.

### Background

PTPN12 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that

### For Research Use Only

regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. PTPN12 contains a C-terminal PEST motif, which serves as a protein–protein interaction domain, and may be related to protein intracellular half-life. PTPN12 was found to bind and dephosphorylate the product of oncogene c-ABL, thus may play a role in oncogenesis. PTPN12 was shown to interact with, and dephosphorylate, various of cytoskeleton and cell adhesion molecules, such as p130 (Cas), CAKbeta/PTK2B, PSTPIP1, and paxillin, which suggested its regulatory roles in controlling cell shape and mobility.