

Recombinant Human PTPN12 Protein

Catalog Number: PKSH031088

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

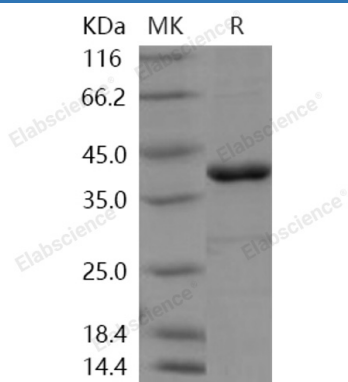
Description

Species	Human
Source	Baculovirus-Insect Cells-derived Human PTPN12 protein Met 1-Gln355
Calculated MW	41.8 kDa
Observed MW	41 kDa
Accession	AAA36529.1
Bio-activity	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

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 8.0 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.
Reconstitution	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 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.

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