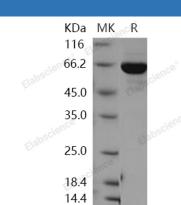
Recombinant Human PTPN12 Protein (aa 1-355, His &GST Tag)

Catalog Number: PKSH031089

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, with an N-
	terminal His & GST
Calculated MW	69.4 kDa
Observed MW	64 kDa
Accession	AAA36529.1
Bio-activity	Measured by its ability to dephosphorylate a phosphotyrosine residue in an EGF
	receptor 988-998 phosphopeptide substrate, R&D Systems, Catalog # ES006. The
	specific activity is $> 15 \ \mu moles/min/mg$.
Properties	
Purity	> 90 % 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 $< -20^{\circ}C$ 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	



> 90 % as determined by reducing SDS-PAGE.

Background

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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 mobilit.