## Recombinant Human ROR1 Protein (His Tag)

## Catalog Number: PKSH033647

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

Description		
Species	Human	
Source	HEK293 Cells-derived Human ROR1 protein Gln30-Glu403, with an C-terminal His	
Calculated MW	42.8 kDa	
Observed MW	60-80 kDa	
Accession	Q01973	
Bio-activity	Not validated for activity	
Properties		
Purity	> 95 % 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	ion Lyophilized from a 0.2 μm filtered solution of 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.	
Reconstitution	Please refer to the printed manual for detailed information.	

## Data

kDa	MK	R
120 90 60	-	
40	-	
30	-	
20	_	
14	-	

> 95 % as determined by reducing SDS-PAGE.

## Background

Receptor tyrosine kinase-like orphan receptor 1 (ROR1); also known as neurotrophic tyrosine kinase; it is a member of the ROR family within receptor tyrosine kinases (RTK) superfamily. Human ROR1 is a type I transmembrane protein with 937 amino acids (aa) in length. It contains a 29 aa signal sequence; a 377 aa extracellular domain (ECD); a 21 aa transmembrane segment; and a 510 aa cytoplasmic region. ROR1 expressed strongly in human heart; lung and kidney; but weakly in the CNS. At developmental stage; it expressed at high levels during early embryonic development. ROR1 has been shown to have very low kinase activity in vitro and is unlikely to function as a tyrosine kinase in vivo. It may act as a receptor for wnt ligand WNT5A which may result in the inhibition of WNT3A-mediated signaling.