

## Recombinant Human ROR1 Protein (ECD, His Tag)

Catalog Number: PKSH030440

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

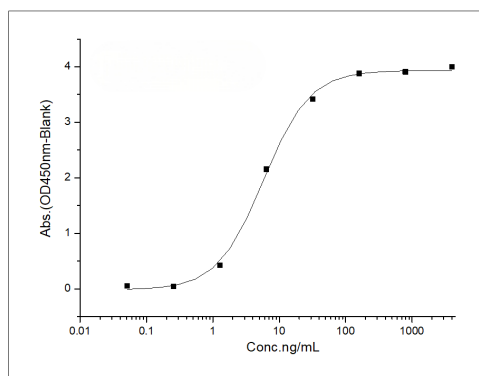
### Description

|                      |  |
|----------------------|--|
| <b>Species</b>       | Human  |
| <b>Source</b>        | HEK293 Cells-derived Human ROR1 protein Met 1-Glu403, with an C-terminal His |
| <b>Calculated MW</b> | 43.4 kDa   |
| <b>Accession</b>     | NP_005003.2  |
| <b>Bio-activity</b>  | Not validated for activity   |

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 95 % 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<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.             |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

### Data



Immobilized Anti-ROR1 Antibody, human IgG1 at 2 µg/mL (100 µL/well) can bind Recombinant Human ROR1 Protein (ECD, His Tag) (Cat: PKSH030440), the EC<sub>50</sub> is 3.0-9.0 ng/mL.

### Background

Receptor tyrosine kinase-like orphan receptor 1 (ROR1), also known as neurotrophic tyrosine kinase, 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.

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