

# Active Recombinant Human ROR1 protein, Fc/Avi-tagged, Biotinylated

Cat. No. ROR1-051H Lot. No. (See product label)

## SPECIFICATION

### Product Overview

Biotinylated Recombinant Human ROR1(Ala24-Glu403) protein, fused to Fc/Avi tag at the C-terminus, was expressed in HEK293 cells .

### Species

Human

### Source

HEK293

### ProteinLength

Ala24-Glu403

### Description

ROR1 (Receptor tyrosine kinase-like orphan receptor 1), also known as neurotrophic tyrosine kinase receptor-related 1 (NTRKR1), is a member of the ROR family within receptor tyrosine kinases (RTK) superfamily. Two ROR family members (ROR1 and ROR2) have been identified and are characterized by the intracellular tyrosine kinase domains, highly related to those of the Trk-family receptor tyrosine kinases, and by the extracellular Frizzled-like cysteine-rich domains and kringle domains, which are common to receptors of the Wnt family members (1, 2). 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. Human ROR1 shares 97% and 58% aa sequence identity with mouse ROR1 and human ROR2, respectively (2, 3). ROR1 has been shown to play crucial roles in developmental morphogenesis by acting as receptors or co-receptors to mediate Wnt5a-induced signaling (4). The bioactivity of ROR1 is measured by its ability to bind biotinylated recombinant mouse Wnt-5a in a

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<b>Predicted N Terminal</b>	Ala24
<b>Form</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
<b>Bio-activity</b>	Measured by its binding ability in a functional ELISA. When Human ROR1 Antibody is immobilized at 0.5 µg/mL (100 µ/well), Biotinylated Recombinant Human ROR1 Fc Chimera Avi-tag binds with an ED50 of 0.6-3.6 ng/mL.
<b>Molecular Mass</b>	85-105 kDa, under reducing conditions
<b>Endotoxin</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Applications</b>	Bioactivity
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after reconstitution.
<b>Reconstitution</b>	Reconstitute at 500 µg/mL in PBS.
<b>Conjugation</b>	Biotin
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	ROR1 receptor tyrosine kinase-like orphan receptor 1 [ Homo sapiens ]
<b>Official Symbol</b>	ROR1

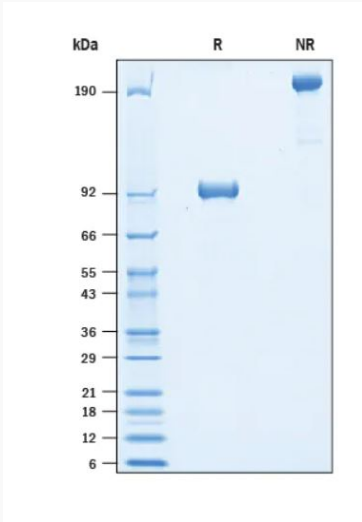
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<b>Synonyms</b>	ROR1; receptor tyrosine kinase-like orphan receptor 1; NTRKR1; tyrosine-protein kinase transmembrane receptor ROR1; neurotrophic tyrosine kinase receptor-related 1; neurotrophic tyrosine kinase, receptor-related 1; dJ537F10.1; MGC99659;
<b>Gene ID</b>	4919
<b>mRNA Refseq</b>	NM_001083592
<b>Protein Refseq</b>	NP_001077061
<b>MIM</b>	602336
<b>UniProt ID</b>	Q01973

**SDS-PAGE**



2 µg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.

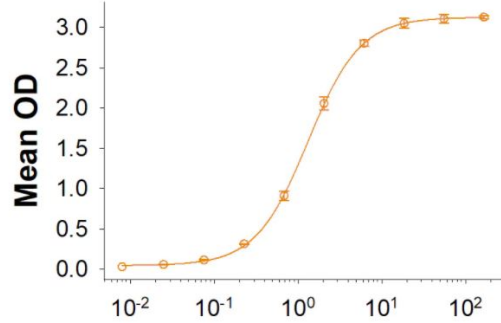
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**Binding Activity**



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