

# Human ROR2 Protein; His Tag

## Product Information

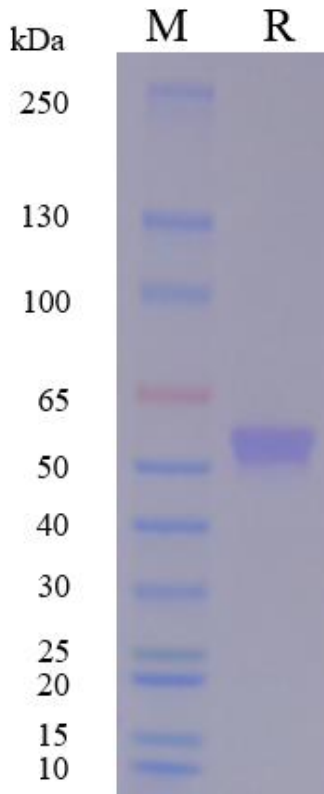
<b>Product Name</b>	Human ROR2 Protein; His Tag
<b>Storage temp</b>	Store at $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
<b>Catalog# / Size</b>	<b>GM-88579RP-100 / 100 <math>\mu\text{g}</math></b> <b>GM-88579RP-1000 / 1 mg</b>

## Protein Information

<b>Alternative Names</b>	NTRKR2
<b>Source</b>	Human ROR2 Protein; His Tag (GM-88579RP) is expressed from human 293 cells (HEK-293). It contains AA Glu 34 - Gly 403 (Accession # A1L4F5-1) . This protein carries a His tag at the C-terminus.
<b>Purity</b>	> 95% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
<b>Predicted Mol Mass</b>	42.2 kDa
<b>Formulation</b>	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
<b>Description</b>	ROR2 protein is a receptor tyrosine kinase that belongs to the ROR family (related to the tropomyosin receptor kinase family). It is encoded by the ROR2 gene and is a protein associated with skeletal development and tissue morphogenesis. ROR2 protein was initially identified in fetal tissues and later detected in various cell types including osteoblasts, chondrocytes, and multiple cancer cells. ROR2 protein regulates cell polarity, migration, and differentiation by binding to its ligand Wnt5a and activating non-canonical Wnt signaling pathways, such as the planar cell polarity (PCP) pathway and the Wnt/ $\text{Ca}^{2+}$ pathway. Osteoblasts and chondrocytes are important types of mesenchymal cells with critical functions in bone formation, cartilage development, and tissue patterning, making them central members of the skeletal system. Research indicates that ROR2 protein plays a significant role in promoting embryonic morphogenesis, enhancing cell movement, and modulating tissue organization. Additionally, the expression of ROR2 protein is associated with skeletal disorders such as Robinow syndrome, as well as tumor progression, metastasis, and immune modulation in various cancers, making it a potential target for regenerative medicine and cancer immunotherapy.

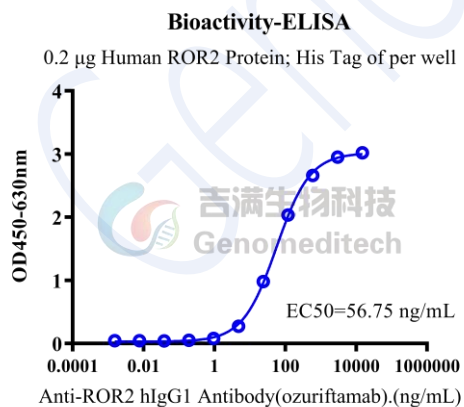
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## SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity-ELISA



Human ROR2 Protein; His Tag (Catalog # GM-88579RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-ROR2 hIgG1 Antibody (ozuriftamab) (Catalog # GM-87825AB) were added.