

Synonym

ROR1,NTRKR1

Source

Human / Cynomolgus / Rhesus macaque ROR1, Fc Tag (RO1-H5250) is expressed from human 293 cells (HEK293). It contains AA Gln 30 - Glu 403 (Accession # Q01973-1). In the region Gln 30 - Glu 403, the AA sequence of Human, Cynomolgus and Rhesus macaque ROR1 are homologus. Predicted N-terminus: Gln 30

Molecular Characterization

ROR1(Gln 30 - Glu 403) Fc(Pro 100 - Lys 330) Q01973-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 68.6 kDa. The protein migrates as 79-95 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

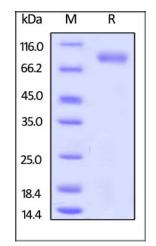
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

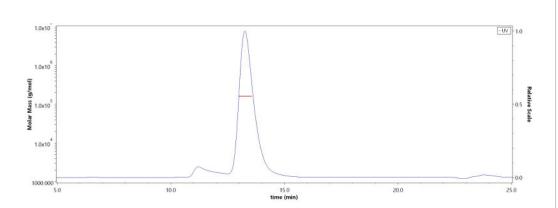
SDS-PAGE



Human / Cynomolgus / Rhesus macaque ROR1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

SEC-MALS

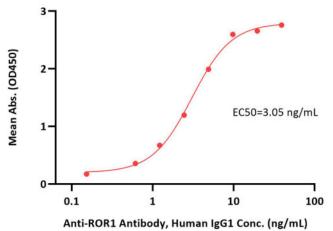


The purity of Human / Cynomolgus / Rhesus macaque ROR1, Fc Tag (Cat. No. RO1-H5250) is more than 90% and the molecular weight of this protein is around 155-185 kDa verified by SEC-MALS.

Report

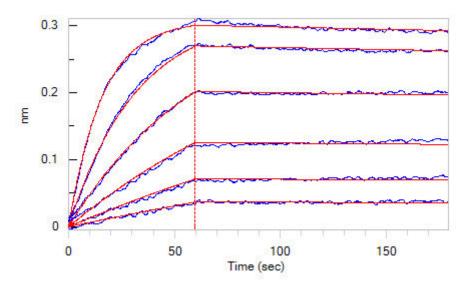


Human / Cynomolgus / Rhesus macaque ROR1, Fc Tag ELISA 0.2 μ g of Human / Cynomolgus / Rhesus macaque ROR1, Fc Tag per well



Immobilized Human / Cynomolgus / Rhesus macaque ROR1, Fc Tag (Cat. No. RO1-H5250) at 2 μ g/mL (100 μ L/well) can bind Anti-ROR1 Antibody, Human IgG1 with a linear range of 0.3-5 ng/mL (QC tested).

Bioactivity-BLI



Loaded Anti-Human ROR1 MAb (Mouse IgG1) on AMC Biosensor, can bind Human / Cynomolgus / Rhesus macaque ROR1, Fc Tag (Cat. No. RO1-H5250) with an affinity constant of 0.357 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Tyrosine-protein kinase transmembrane receptor ROR1 is also known as Neurotrophic tyrosine kinase, receptor-related 1 (NTRKR1), which belongs to the protein kinase superfamily or tyr protein kinase family or ROR subfamily. ROR1 contains 1 FZ (frizzled) domain, 1 Ig-like C2-type (immunoglobulin-like) domain, 1 kringle domain, 1 protein kinase domain. ROR1 is expressed at high levels during early embryonic development. The expression levels drop strongly around day 16 and there are only very low levels in adult tissues. Isoform Short is strongly expressed in fetal and adult CNS and in a variety of human cancers, including those originating from CNS or PNS neuroectoderm. ROR1 could interact with casein kinase 1 epsilon (CK1ɛ) to activate phosphoinositide 3-kinase-mediated AKT phosphorylation and cAMP-response-element-binding protein (CREB), which was associated with enhanced tumor-cell growth.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

