Human Nogo Receptor / NgR Protein, His Tag (SPR verified)

Catalog # NOR-H52H3

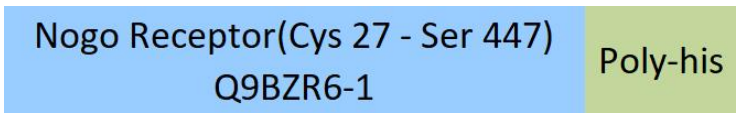
Synonym

Reticulon-4 receptor，Nogo-66 receptor

Source

Human Nogo Receptor, His Tag(NOR-H52H3) is expressed from human 293 cells (HEK293). It contains AA Cys 27 - Ser 447 (Accession # Q9BZR6). Predicted N-terminus: Cys 27

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 47.2 kDa. The protein migrates as 63-70 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.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 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

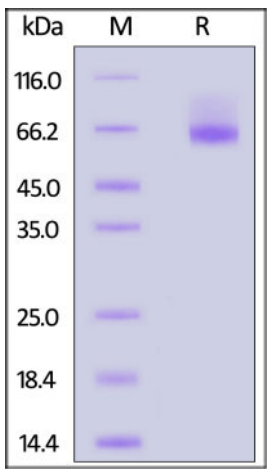
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

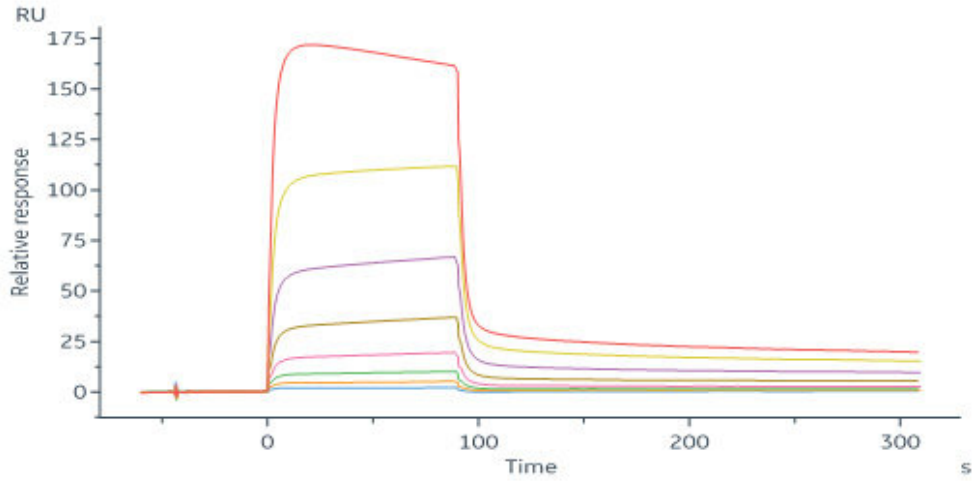
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

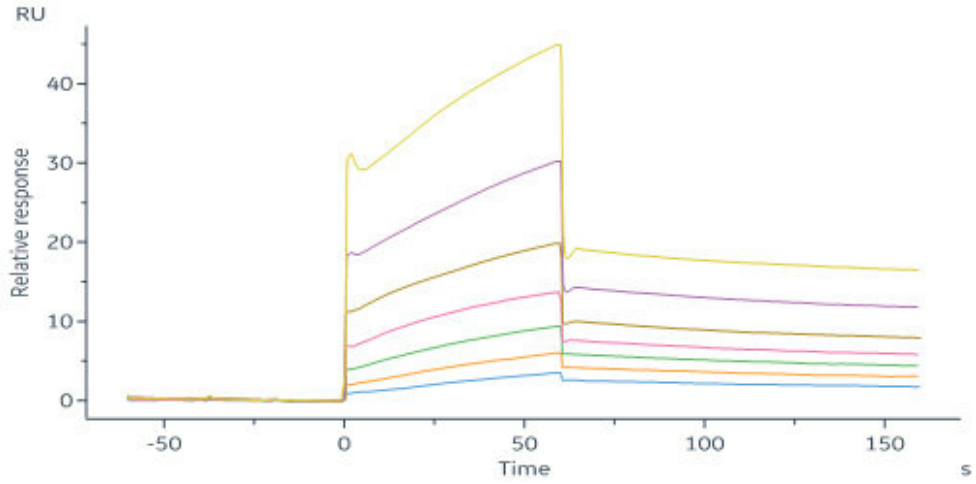


Human Nogo Receptor, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-SPR



Human Nogo Receptor, His Tag (Cat. No. NOR-H52H3) capture on NTA-Series S sensor chip can bind Human MAG, Fc Tag (Cat. No. MAG-H5254) with an affinity constant of 2.21 μM as determined in a SPR assay (Biacore 8K) (QC tested).



Human MAG, Fc Tag (Cat. No. MAG-H5254) captured on Protein A Chip can bind Human Nogo Receptor, His Tag (Cat. No. NOR-H52H3) with an affinity constant of 4.81 μM as determined in SPR assay (Biacore 8K) (Routinely tested).

Background

Nogo receptor/Reticulon-4 receptor plays a role in regulating axon regeneration and neuronal plasticity in the adult central nervous system. Plays a role in postnatal brain development. Required for normal axon migration across the brain midline and normal formation of the corpus callosum. Protects motoneurons against apoptosis; protection against apoptosis is probably mediated via interaction with MAG. Acts in conjunction with RTN4 and LINGO1 in regulating neuronal precursor cell motility during cortical development. Like other family members, plays a role in restricting the number dendritic spines and the number of synapses that are formed during brain development.

Clinical and Translational Updates

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