

## Nogo Receptor/NgR Protein, Cynomolgus (HEK293, His)

Cat. No.:	HY-P700802
Synonyms:	Nogo receptor; RTN4R; NOGOR; NgR1; Nogo-66 receptor; NGR
Species:	Cynomolgus
Source:	HEK293
Accession:	Q9N0E3 (C27-S447)
Gene ID:	102139327
Molecular Weight:	60-73 kDa

### PROPERTIES

<b>Biological Activity</b>	Immobilized Cynomolgus NOGOR, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-NOGOR Antibody, hFc Tag with the EC <sub>50</sub> of 14.8ng/ml determined by ELISA.
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	Nogo Receptor/NgR Protein serves as a receptor for RTN4, OMG, and MAG, extending its functional repertoire to include recognition of sialylated gangliosides GT1b and GM1, chondroitin sulfate proteoglycans, and heparin. The activation of intracellular signaling cascades through the NGFR coreceptor triggers Rho-mediated downstream reorganization of the actin cytoskeleton, leading to axonal growth inhibition. This protein likely plays a crucial role in regulating axon regeneration and neuronal plasticity within the adult central nervous system, contributing to postnatal brain development, axon migration, and corpus callosum formation. Nogo Receptor/NgR also exhibits a protective effect on motoneurons against apoptosis, potentially mediated through its interaction with MAG. Collaborating with RTN4 and LINGO1, it participates in the regulation of neuronal precursor cell motility during cortical development. Moreover, akin to other family members, it is implicated in the control of dendritic spine and synapse numbers during brain development. Operating as a homodimer, Nogo Receptor/NgR engages in a complex network of molecular interactions with various partners, including OMG, MAG, RTN4, NGFR, LINGO1, KIAA0319L, and OLFM1, further elucidating its multifaceted roles in cellular processes and neural development.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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