

Human RGMa Protein

Cat. No. RGM-HM401



Description

Source	Recombinant Human RGMa Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Cys48-Gly422.
Accession	Q96B86-1
Molecular Weight	The protein has a predicted MW of 44.5 kDa. Due to glycosylation, the protein migrates to 45-48 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

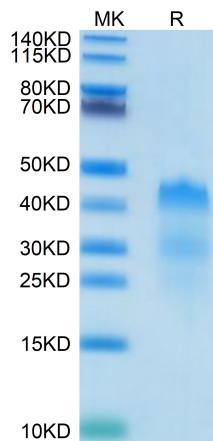
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Repulsive guidance molecule (RGM) is a glycosylphosphatidylinositol (GPI)-anchored glycoprotein that has diverse functions in the developing and pathological central nervous system (CNS). The binding of RGM to its receptor neogenin regulates axon guidance, neuronal differentiation, and survival during the development of the CNS. RGMa induces T cell activation in experimental autoimmune encephalomyelitis (EAE), which is the animal model of multiple sclerosis (MS). RGM is expressed in pathogenic Th17 cells and induces neurodegeneration by binding to neogenin.

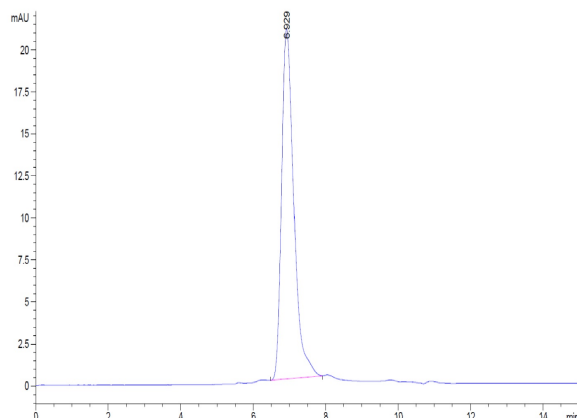
Assay Data

Bis-Tris PAGE



Human RGMa on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



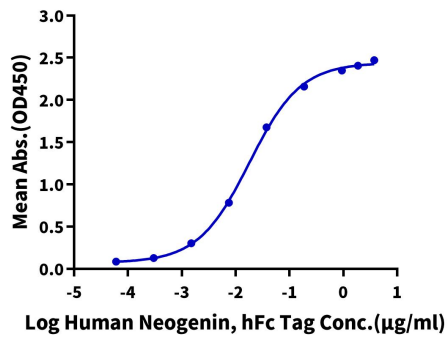
The purity of Human RGMa is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human RGMa, His Tag ELISA

0.5µg Human RGMa, His Tag Per Well



Immobilized Human RGMa, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human Neogenin, hFc Tag with the EC50 of 18.0ng/ml determined by ELISA (QC Test).