

Synonym

Glycoprotein G

Source

FITC-Labeled Rabies virus Glycoprotein G, His Tag (GLN-RF5E3) is expressed from Baculovirus-Insect cells.

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 53.6 kDa. The protein migrates as 60-62 kDa and >116 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 2-3.

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 25 mM HEPES,150 mM 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

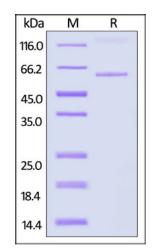
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and 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



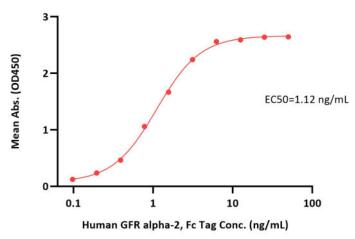
FITC-Labeled Rabies virus Glycoprotein G, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.





Bioactivity-ELISA

FITC-Labeled Rabies virus Glycoprotein G, His Tag ELISA 0.1 μ g of FITC-Labeled Rabies virus Glycoprotein G, His Tag per well



Immobilized FITC-Labeled Rabies virus Glycoprotein G, His Tag (Cat. No. GLN-RF5E3) at 1 μ g/mL (100 μ L/well) can bind Human GFR alpha-2, Fc Tag with a linear range of 0.1-3 ng/mL (QC tested).

Background

Rabies virus (RABV), scientific name Rabies lyssavirus, is a deadly neurotropic virus that causes rabies in humans and animals. Rabies virus has an extremely wide host range and its transmission most often occur through the saliva of animals. Without intervention prior to disease progression, rabies has the highest case fatality of any infectious disease. RABV contains a single-stranded negative-sense RNA genome that encodes five structural proteins: nucleoprotein (N), phosphoprotein (P), matrix protein (M), glycoprotein (G), and RNA-dependent RNA polymerase (L). Among these viral proteins, the RABV glycoprotein (RABV-G) is a pivotal player mediating virus entry and the major target of neutralizing antibodies, thus a key factor for vaccine and drug design.

Clinical and Translational Updates

