

For Research Use Only

Recombinant Mouse EGFR protein (rFc Tag) (HPLC verified)



Catalog Number: Eg3498

Basic Information

Species:
Mouse

Purity:
>90 %, SDS-PAGE
>90%, SEC-HPLC

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE
>90%, SEC-HPLC

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Mouse EGFR protein Leu25-Ser647 (Accession# Q01279) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
13649

Accession:
Q01279

Predicted Molecular Mass:
95.6 kDa

SDS-PAGE:
100-120 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

EGFR (Epidermal Growth Factor Receptor) is a receptor for epithelial growth factor (EGF) cell proliferation and signaling and belongs to the ErbB receptor family, also known as HER1 or ErbB1. It is a glycoprotein, a tyrosine kinase-type receptor, with a cell-membrane penetration, and a molecular weight of approximately 170 kDa. EGFR is located on the surface of the cell membrane and is activated by binding to ligands, including EGF and TGFα. Upon activation, EGFR is converted from a monomer to a dimer, and activation activates its intracellular kinase pathways, including the MAPK, Akt, and JNK pathways, which induces cellular proliferation. Mutations in or overexpression of EGFR generally lead to tumorigenesis, and have been associated with the development of a variety of cancers, including lung cancer, anogenital carcinoma, and polymorphic glioblastoma, and glioblastoma multiforme, among others. (PMID: 37036745)

References

1. Voldborg BR, et al. Ann Oncol. 1997;8(12):1197-206.
2. Talukdar S, et al. Adv Cancer Res. 2020;147:161-188.
3. Sapmaz A, et al. Oncotarget. 2023;14:297-301.

Synonyms

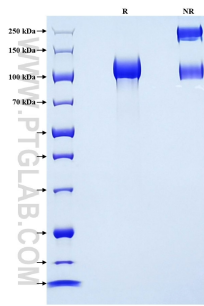
EC:2.7.10.1, EGFR, ErbB, erbb 1, Erbb1

For technical support and original validation data for this product please contact

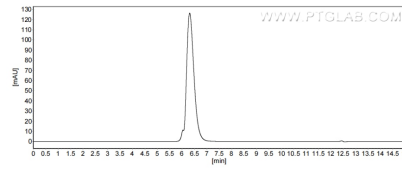
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Purity of Recombinant Mouse EGFR was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



The purity of Mouse EGFR was greater than 90% as determined by SEC-HPLC.