Human EGF R Protein, His Tag
Catalog # EGR-H5222

Synonym
EGFR, ERBB, ERBB1, HER1, PIG61, mENA

Source
Human EGF R, His Tag (EGR-H5222) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 645 (Accession # P00533-1). Predicted N-terminus: Leu 25

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

The protein has a calculated MW of 70.5kDa. The protein migrates as 95-120 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin
Less than 1.0 EU per μg by the LAL method.

Purity
>95% as determined by SDS-PAGE.

Formulation
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally trehalose is added as protectant before lyophilization.

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.

No activity loss was observed after storage at:
- 4-8 °C for 12 months in lyophilized state;
- -70 °C for 12 months under sterile conditions after reconstitution.

SDS-PAGE

Human EGF R, 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 95%.

Bioactivity-ELISA
Immobilized Cetuximab at 2 μg/mL (100 μL/well) can bind Human EGF R, His Tag (Cat. No. EGR-H5222) with a linear range of 0.8-6 ng/mL (QC tested).

Bioactivity-SPR

Erbitux (Cetuximab) captured on CM5 chip via anti-human IgG Fc antibodies surface, can bind Human EGF R, His Tag (Cat. No. EGR-H5222) with an affinity constant of 1.3 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Background
The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. The epidermal growth factor receptor is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). Mutations affecting EGFR expression or activity could result in cancer.

References

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