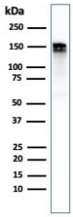
Recombinant EGF Receptor Antibody [clone GFR/2968R] (V3981)

Catalog No.	Formulation	Size
V3981-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3981-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3981SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3981IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

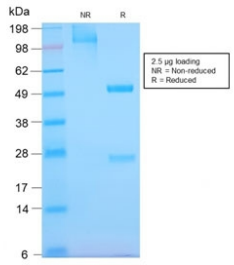
Recombinant RABBIT MONOCLONAL

Bulk quote request

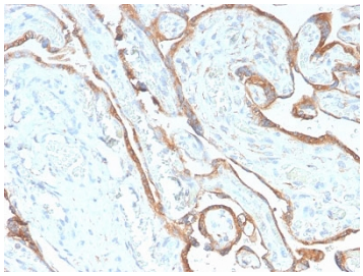
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	GFR/2968R
Purity	Protein A affinity chromatography
UniProt	P00533
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This recombinant EGF Receptor antibody is available for research use only.



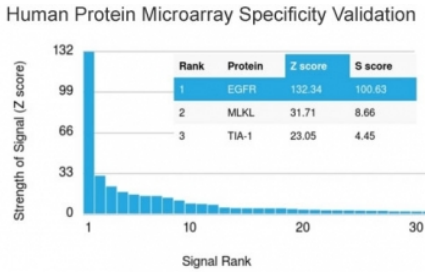
Western blot testing of human A431 cell lysate with recombinant EGF Receptor antibody. Expected molecular weight: 134-180 kDa depending on glycosylation level.



SDS-PAGE analysis of purified, BSA-free recombinant EGF Receptor antibody (clone GFR/2968R) as confirmation of integrity and purity.



IHC testing of FFPE human placenta with recombinant EGF Receptor antibody (clone GFR/2968R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant EGF Receptor antibody (clone GFR/2968R). These results demonstrate the foremost specificity of the GFR/2968R mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Recombinant EGF Receptor antibody detects the epidermal growth factor receptor (EGFR), a transmembrane tyrosine kinase encoded by the EGFR gene. EGFR belongs to the ErbB family of receptors and is widely expressed in epithelial tissues, where it regulates cell growth, survival, and differentiation. Binding of ligands such as epidermal growth factor and transforming growth factor alpha triggers receptor dimerization, autophosphorylation, and downstream signaling. Because dysregulated EGFR activity contributes to tumorigenesis, Recombinant EGF Receptor antibody is an essential tool in oncology and cell signaling research.

Structurally, EGFR consists of an extracellular ligand-binding domain, a single transmembrane helix, and an intracellular tyrosine kinase domain. Ligand binding induces conformational changes that promote dimer formation and kinase activation, initiating cascades such as the MAP kinase, PI3K AKT, and JAK STAT pathways. These signals regulate proliferation and survival, but mutations or overexpression can lead to uncontrolled growth and malignancy.

The Recombinant EGF Receptor antibody clone GFR/2968R provides specific and reproducible detection. Recombinant production ensures lot-to-lot consistency, making clone GFR/2968R reliable for long-term projects. Peer-reviewed studies have reported the use of EGFR antibodies to explore tumor signaling networks, investigate targeted therapy resistance, and profile expression in various carcinomas. This clone provides dependable recognition of EGFR in both laboratory and translational settings.

Research using clone GFR/2968R has highlighted how EGFR overexpression correlates with poor prognosis in cancers such as non-small cell lung carcinoma, glioblastoma, and head and neck squamous cell carcinoma. In addition, this antibody aids in evaluating therapeutic responses to EGFR-targeted inhibitors and monoclonal antibodies. Because EGFR is central to many signaling pathways, accurate detection supports studies in both disease and normal epithelial physiology.

NSJ Bioreagents supplies this Recombinant EGF Receptor antibody to support investigations into receptor biology, cancer progression, and therapeutic resistance. Alternate names include EGFR antibody, ErbB1 antibody, epidermal growth factor receptor tyrosine kinase antibody, proto-oncogene c-ERBB antibody, and HER1 antibody.

Application Notes

Titering of the recombinant EGF Receptor antibody may be required for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human protein was used as the immunogen for the recombinant EGF Receptor antibody.

Storage

Store the recombinant EGF Receptor antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).