

EGFR Antibody / Epidermal Growth Factor Receptor [clone 31G7] (V2485)

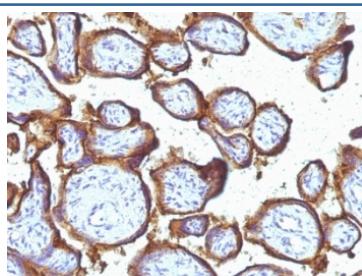
Catalog No.	Formulation	Size
V2485-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2485-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2485SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2485IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml



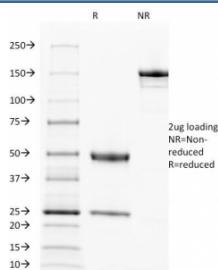
Citations (11)

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	31G7
Purity	Protein G affinity chromatography
UniProt	P00533
Localization	Cell surface
Applications	Flow Cytometry : 0.5-1ug/10 ⁶ cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 2-4ug/ml for 30 min at RT
Limitations	This EGFR antibody is available for research use only.

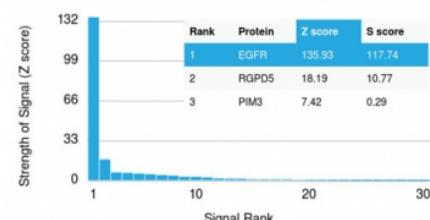


IHC: Formalin-fixed, paraffin-embedded human placenta stained with EGFR antibody (31G7).



SDS-PAGE Analysis of Purified, BSA-Free EGFR Antibody (clone 31G7). Confirmation of Integrity and Purity of the Antibody.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using EGFR antibody (clone 31G7). These results demonstrate the foremost specificity of the 31G7 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

EGFR antibody clone 31G7 is a monoclonal antibody specific for epidermal growth factor receptor, a 170 kDa transmembrane glycoprotein and tyrosine kinase receptor. EGFR belongs to the ErbB receptor family and regulates critical cellular processes including proliferation, survival, adhesion, and differentiation. Dysregulation of EGFR signaling contributes to the development and progression of many cancers, making it one of the most extensively studied oncogenes and therapeutic targets. NSJ Bioreagents provides EGFR antibody clone 31G7 as a trusted reagent for oncology, cell biology, and translational research.

The antibody produces strong membranous staining in epithelial tissues where EGFR is highly expressed, such as skin, lung, and gastrointestinal tract. In pathology, it is frequently applied to confirm EGFR expression in carcinomas, including lung, breast, colorectal, and head and neck cancers. Overexpression or mutation of EGFR has been linked to aggressive tumor behavior and poor prognosis, and detection with this antibody supports both diagnostic and research applications.

In oncology, the antibody has been applied to monitor therapeutic response to EGFR inhibitors, including tyrosine kinase inhibitors and monoclonal antibody therapies. Tracking EGFR expression provides valuable insight into mechanisms of drug resistance and tumor evolution. Researchers also use this antibody to study downstream signaling pathways such as MAPK and PI3K/AKT, which are critical for tumor survival and progression.

In developmental and cell biology, EGFR antibody clone 31G7 has been employed to investigate how EGFR regulates epithelial growth, wound healing, and tissue repair. Its detection reveals how receptor activity shapes morphogenesis and regeneration.

Validated in tissue-based and cell-based studies, the antibody provides reproducible membranous staining with minimal background. It has an extensive publication record spanning oncology, developmental biology, and therapeutic research. Alternate names include epidermal growth factor receptor antibody, ErbB1 antibody, and HER1 antibody.

Application Notes

Optimal dilution of the EGFR antibody should be determined by the researcher.

1. Digest formalin-fixed tissues with Protease at 1mg/ml PBS, pH 7.4 for 10 min at 37°C
2. 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

Human EGF Receptor purified from A431 cells was used as the immunogen for the EGFR antibody.

Storage

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