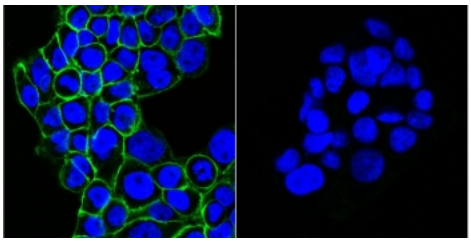
EGFR Antibody CF488 Conjugate / EGF Receptor [clone GFR450] (V2105CF488)

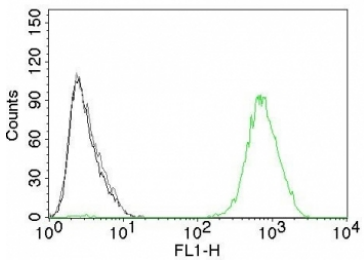
Catalog No.	Formulation	Size
V2105CF488-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

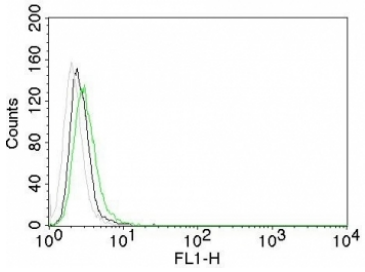
Availability	1-3 business days
Species Reactivity	Human
Format	CF488 Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	GFR450
Purity	Protein G affinity chromatography
UniProt	P00533
Applications	Flow cytometry: 5ul per test per one million cells in 0.1ml or 5ul per 100ul of whole blood Immunofluorescence: 1:50-1:100
Limitations	This EGFR Antibody CF488 Conjugate is available for research use only.



EGFR Antibody CF488 Conjugate IF. Left: Immunofluorescent staining of human A431 cells with CF488-conjugated EGFR antibody (clone GFR450, green) and DAPI nuclear stain (blue). Right: isotype control.



EGFR Antibody Human FACS. Flow cytometry testing of human A431 cells with EGFR antibody (clone GFR450); Black=cells alone, Gray=isotype control, Green= EGFR antibody.



EGFR Antibody Mouse FACS. Flow cytometry testing of mouse NIH3T3 cells with EGFR antibody (clone GFR450); Black=cells alone, Gray=isotype control, Green= EGFR antibody. This antibody is not suitable for mouse sample testing.

Description

EGFR Antibody CF488 Conjugate recognizes Epidermal growth factor receptor, a cell surface receptor tyrosine kinase that regulates ligand-dependent signaling controlling epithelial cell growth, survival, and differentiation. Epidermal growth factor receptor is also commonly referred to as EGFR, ErbB1, and HER1, reflecting its membership in the ErbB receptor family. This CF488-conjugated EGFR Antibody enables direct visualization of EGFR expression without the need for secondary antibodies, supporting fluorescence-based detection approaches in research applications where reduced background and streamlined workflows are desired.

Epidermal growth factor receptor is encoded by the EGFR gene and is predominantly localized to the plasma membrane, where ligand binding induces receptor dimerization and activation of intracellular signaling cascades. Activated EGFR engages pathways such as MAPK and PI3K-AKT that influence proliferation, survival, and cellular responses to external stimuli. EGFR Antibody CF488 Conjugate allows researchers to examine receptor distribution and relative expression levels at the cellular level, facilitating studies of membrane-associated signaling and receptor dynamics in epithelial tissues and cell models.

Altered EGFR expression and signaling activity are frequently observed in a range of cancers, including lung carcinoma, colorectal cancer, and head and neck malignancies. In these contexts, Epidermal growth factor receptor contributes to tumor growth, invasion, and therapeutic resistance. Fluorescently labeled EGFR Antibody reagents such as the CF488 conjugate support research focused on tumor cell identification, receptor localization, and comparative expression analysis across experimental conditions, while avoiding reliance on enzymatic detection systems.

Beyond cancer-related research, EGFR plays important roles in tissue repair, wound healing, and normal epithelial maintenance. Visualization of EGFR using a directly conjugated EGFR Antibody CF488 Conjugate supports studies of receptor trafficking, membrane organization, and cell-to-cell variability in signaling responses. Clone GFR450 is designed to recognize Epidermal growth factor receptor and may be applied in fluorescence-based assays to investigate EGFR biology in normal and disease-relevant research models.

Explore our EGFR Antibody (31G7) page for a broader view of EGFR expression and extensively validated antibody performance across applications.

Application Notes

Optimal dilution of the EGFR Antibody CF488 Conjugate should be determined by the researcher.

Immunogen

Recombinant extracellular domain of human EGFR protein was used as the immunogen for the EGFR antibody.

Storage

Store the EGFR Antibody CF488 Conjugate at 2-8oC, protected from light.

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