

Technical Data Sheet

RecombiMAb anti-mouse/human EGFR (domain III) (LALA-PG)



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Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

Lot Specific Information

Lot Number: Lot Specific*
Volume: Lot Specific*
Concentration: Lot Specific* (generally 4 to 11 mg/ml) *
Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number: CP213
Clone: G5V2-CP213
Isotype: Mouse IgG2a, κ
Recommended Isotype Control(s): RecombiMAb mouse IgG2a (LALA-PG) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Mutations: LALA-PG
Immunogen: Extracellular region of hEGFR (residues Leu25-Lys642)
Reported Applications: ELISA
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: ≤ 0.5 EU/mg (≤ 0.0005 EU/ μ g)
Determined by LAL assay
Purity: $\geq 95\%$
Determined by SDS-PAGE
Sterility: 0.2 μ m filtration
Production: Purified from mammalian cell supernatant in an animal-free facility
Purification: Protein G
Aggregation: $< 5\%$
Determined by SEC
Molecular Weight: 150 kDa

Murine Pathogen Test Results

Mouse Norovirus: Negative, Mouse Parvovirus: Negative, Mouse Minute Virus: Negative, Mouse Hepatitis Virus: Negative, Reovirus Screen: Negative, Lymphocytic Choriomeningitis virus: Negative, Lactate Dehydrogenase-Elevating Virus: Negative, Mouse Rotavirus: Negative, Theiler's Murine Encephalomyelitis: Negative, Ectromelia/Mousepox Virus: Negative, Hantavirus: Negative, Polyoma Virus: Negative, Mouse Adenovirus: Negative, Sendai Virus: Negative, Mycoplasma Pulmonis: Negative, Pneumonia Virus of Mice: Negative, Mouse Cytomegalovirus: Negative, K Virus: Negative

Description

The G5V2 monoclonal antibody reacts with both mouse and human epidermal growth factor receptor (EGFR; ErbB1; HER1; CD331), a transmembrane receptor tyrosine kinase of the ErbB receptor family that regulates cell proliferation, differentiation, survival, migration, and tissue repair. EGFR is widely expressed on epithelial cells and is frequently overexpressed or dysregulated in numerous malignancies, including colorectal, lung, head and neck, pancreatic, and other epithelial cancers. Ligand binding by epidermal growth factor (EGF) and related ligands induces receptor dimerization, activation of intracellular kinase signaling pathways, and downstream MAPK, PI3K/AKT, and JAK/STAT signaling. The G5V2 clone recognizes domain III of the extracellular region of EGFR and blocks ligand binding, thereby inhibiting receptor activation. Unlike many commonly used anti-EGFR antibodies that recognize only human EGFR, G5V2 cross-reacts with

both mouse and human EGFR, making it well suited for studies requiring cross-species target recognition. The antibody has been shown to bind both mouse and human EGFR and inhibit EGF-EGFR interactions. This Bio X Cell recombinant antibody incorporates L234A, L235A, and P329G (LALA-PG) Fc mutations within a mouse IgG2a isotype to markedly reduce Fcγ receptor and complement interactions while preserving FcRn-mediated half-life. The LALA-PG mutations minimize Fc-mediated effector functions, allowing investigators to evaluate the biological consequences of EGFR blockade without confounding immune cell depletion or Fc-dependent mechanisms.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit [?utm_source=cr9k1b#tab_references](https://bioxcell.com/?utm_source=cr9k1b#tab_references) or scan the QR code below.



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