

Technical Data Sheet

RecombiMAb anti-mouse/human VEGF-A (LALA-PG)



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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 Website Link: <https://bioxcell.com/recombimab-anti-mouse-human-vegf-a-lala-pg-cp224>

Product Information

Catalog Number: CP224
Clone: B20-4.1.1-CP224
Isotype: Mouse IgG2a (LALA-PG), 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: Human VEGF
Reported Applications: *in vivo* VEGF-A neutralization
in vitro VEGF-A neutralization
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 A
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

B20-4.1.1-CP224 is a recombinant monoclonal antibody that reacts with both mouse and human vascular endothelial growth factor A (VEGF-A). This antibody binds to all isoforms of VEGF-A, and it does not show any detectable cross-reactivity against VEGF-B, VEGF-C, VEGF-D, and placental growth factor. VEGF-A is a ~45 kDa homodimeric, disulfide-linked glycoprotein that plays a central role in endothelial cell proliferation, migration, angiogenesis, vasculogenesis, and vascular permeability. Solid tumors often depend on angiogenesis for growth and neovascularization, and inhibition of VEGF-A with

neutralizing antibodies represents a key therapeutic strategy in cancer biology. In preclinical research, B20-4.1.1 is a well-characterized anti-VEGF-A antibody that potently neutralizes both murine and human VEGF-A. This clone effectively blocks the interaction of all isoforms of VEGF-A with its receptors, VEGFR1 (Flt-1) and VEGFR2 (Flk-1/KDR). Bevacizumab biosimilar antibodies, on the other hand, do not reliably neutralize murine VEGF-A to block VEGFR signaling, limiting their utility in mouse models. B20-4.1.1-CP224 has a mouse IgG2a Fc that includes the silencing mutations LALA-PG, rendering it unable to bind endogenous murine Fcγ receptors or C1q to induce antibody-dependent cell-mediated cytotoxicity (ADCC) or complement-dependent cytotoxicity (CDC). This allows for the evaluation of the anti-angiogenic effect without the contribution of Fc-mediated effector functions. Studies have demonstrated Fc-silent B20-4.1.1 with IgG2a LALA-PG isotype exhibited an increased therapeutic effect on lesion size in a laser-induced choroidal neovascularization (CNV) mouse model compared to B20-4.1.1 with an effector competent mouse IgG2a isotype. This suggests removing FcγR/C1q interactions does not impair—and may even enhance—the anti-angiogenic effect of B20-4.1.1 in certain disease models.

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 https://bioxcell.com/recombimab-anti-mouse-human-vegf-a-lala-pg-cp224?utm_source=cr9k1b#tab_references or scan the QR code below.



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