

Technical Data Sheet

RecombiMAb anti-mouse/human TYRP1/TRP1 (gp75)



bioxcell.com

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 Website Link: <https://bioxcell.com/recombimab-anti-mouse-human-tyrp1-trp1-gp75-cp216>

Product Information

Catalog Number: CP216
Clone: TA99-CP216
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: SK-MEL-23 melanoma cells
Reported Applications: ELISA
Immunofluorescence*
Flow cytometry*
*Reported for the original TA99 antibody
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

The TA99-CP216 antibody is a recombinant version of the original TA99 antibody whose constant region includes the Fc silencing mutation variant LALA-PG rendering it unable to bind endogenous murine Fc γ receptors or C1q to induce antibody-dependent cell-mediated cytotoxicity (ADCC) or complement-dependent cytotoxicity (CDC). This is useful to study

the effects of TYRP1 blockade and targeting without FcγR/complement-mediated cell killing, immune activation, or Fc-driven biodistribution artifacts to enable clean mechanistic dissection. Fc-silent antibodies can also improve in-vitro assays by reducing non-specific signaling and background. The LALA-PG variant has demonstrated significantly reduced effector function, C1q binding and C3 fixation compared to other common silencing mutations while retaining favorable biophysical and manufacturing properties and preserving FcRn-mediated half-life. The highly controlled sequence and lack of genetic drift in recombinant antibodies provide more reliable and reproducible results over hybridoma derived antibodies. TA99-CP216 binds mouse and human TYRP1 (gp75/MEL-5), a melanocyte-specific, melanosomal enzyme required for eumelanin synthesis and melanosome stability. Loss-of-function TYRP1 mutations cause hypopigmentation (brown coat in mice; oculocutaneous albinism type 3 in humans), highlighting its role in skin, eye, and hair pigmentation. In melanoma, TYRP1 is highly expressed and its mRNA can sequester miR-16, indirectly promoting tumor cell growth and poor outcomes. TYRP1 function depends on zinc transporters (ZNT5–ZNT7), distinguishing it from the copper-dependent tyrosinase.

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-tyrp1-trp1-gp75-cp216?utm_source=cr9k1b#tab_references or scan the QR code below.



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