

Technical Data Sheet

RecombiMAb anti-mouse IL-12 β (p40) (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 Information

Catalog Number: CP209
Clone: C17.8-CP209
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: Recombinant mouse IL-12 p70
Reported Applications: ELISA
Flow cytometry
Western blot
in vivo IL-12 β (p40) neutralization*
p40 affinity chromatography*
Immunoprecipitation*
*Reported for the original C17.8 clone.
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 C17.8-CP209 antibody is a recombinant, chimeric version of the original C17.8 antibody. The variable domain sequences are identical but the constant region sequences have been switched from Rat IgG2a, κ to mouse IgG2a, κ for use

in murine models. Additionally, the constant region includes the Fc silencing mutation variant 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 pure cytokine neutralization without any FcγR or complement mediated effector functions so that the biological readout reflects neutralization rather than immune cell depletion or Fc-dependent inflammation. 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. Species-matched chimeric antibodies demonstrate reduced immunogenicity and formation of anti-drug antibodies (ADAs) compared to xenogenic antibodies in animal models. The highly controlled sequence and lack of genetic drift in recombinant antibodies provide more reliable and reproducible results over hybridoma derived antibodies. The C17.8 antibody reacts with mouse IL-12β, also known as p40. p40 is a 40 kDa subunit of both IL-12 and IL-23. IL-12 is a heterodimeric cytokine composed of subunits IL-12α p35 and IL-12β p40. The p40 subunit of IL-12 also combines with p19, a protein that shows no biological activity by itself, to form IL-23. IL-12 is secreted by activated monocytes, macrophages, and dendritic cells while IL-23 is secreted by activated dendritic cells and epithelial cells. IL-12 plays roles in T lymphocyte differentiation, IFNγ production, and NK cell cytotoxicity. The C17.8 antibody has been shown to neutralize both IL-12 and IL-23 bioactivity.

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/references/?utm_source=cr9k1b#tab_references) or scan the QR code below.



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