Technical Data Sheet

InVivoSIM anti-human IL-4Rα (CD124) (Dupilumab Biosimilar)

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:	**SIM0023**
Clone:	**Dupilumab**
Isotype:	Human IgG4, κ
Recommended Isotype Control(s):	RecombiMAb human IgG4 (S228P) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Mutations:	S228P
Immunogen:	Human IL-4Rα
Reported Applications:	Functional assays
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤0.5EU/mg (≤0.0005EU/μg) Determined by LAL assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm filtration
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein A
Aggregation:	<5% Determined by SEC
RRID:	
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

This non-therapeutic biosimilar antibody uses the same variable regions as the therapeutic antibody Dupilumab making it ideal for research use. This Dupilumab biosimilar reacts with human IL-4Rα. IL-4Rα also known as CD124, associates with either the common γ-chain (CD132) to form type 1 IL-4R which only binds IL-4 or with IL-13Rα1 to form type II IL-4R which can bind IL-4 or IL-13. IL-4Rα is expressed on various cell types, including T helper type 2 (Th2) cells, mast cells, basophils, eosinophils, macrophages, dendritic cells, and endothelial cells. The expression of IL-4Rα on these different cell types allows for a variety of cellular responses to IL-4 and IL-13, including regulation of immune cell differentiation, activation, proliferation, and survival. Additionally, IL-4 and IL-13 signaling through IL-4Rα can promote tissue repair and remodeling, as well as contribute to the pathogenesis of various allergic and inflammatory diseases. Dupilumab binds IL-4Rα and inhibits signaling

of both IL-4 and IL-13. It has shown efficacy across multiple diseases with underlying type 2 signatures and is used for treatment of asthma, atopic dermatitis, and chronic sinusitis with nasal polyposis.

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

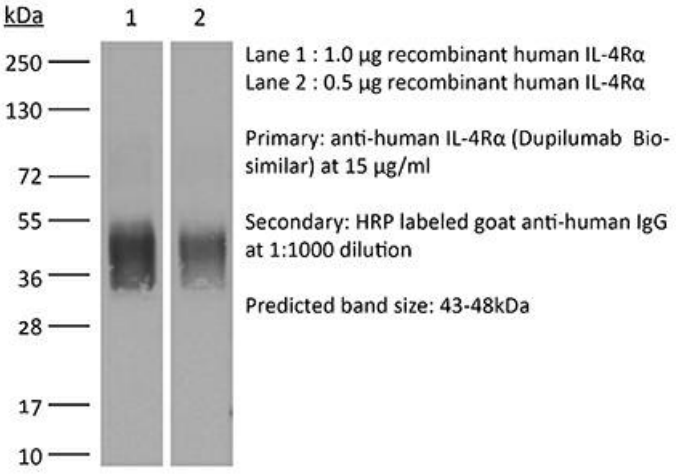
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/sim0023?bxcs=9k1b3a#tab_references or scan the QR code below.

Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.



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