Technical Data Sheet

InVivoSIM anti-human CXCL10 (IP-10) (Eldelumab 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:	**SIM0076**
Clone:	**Eldelumab**
Isotype:	Human IgG1, κ
Recommended Isotype Control(s):	RecombiMAb human IgG1 (K214R/L234F/L235E/P331S) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Mutations:	K214R
Immunogen:	Human CXCL10
Reported Applications:	*in vivo* functional assays *in vitro* functional assays Flow cytometry ELISA
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<0.5EU/mg (<0.0005EU/µg) Determined by LAL gel clotting 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, eldelumab, making it ideal for research use. Eldelumab is a humanized IgG1, k monoclonal antibody that specifically binds the pro-inflammatory

cytokine C-X-C motif chemokine ligand 10 (CXCL10), also known as 10 kDa interferon gamma-induced protein (gamma-IP10 or IP-10). Importantly, the Fc of the eldelumab antibody is engineered to replace lysine (K) at position 214 with arginine (R) to reduce the Fc effector function (i.e., to lower the ADCC or CDC activity of the antibody). CXCL10 is a secreted protein that is mainly produced by cancer cells, endothelial cells, fibroblasts, and monocytes in response to IFN-gamma secretion. CXCL10 binds its only receptor, CXCR3, to activate Src, PI3K-AKT, Erk1/2, MAKP, and other downstream pathways. The CXCL10-CXCR3 axis activates G protein-mediated signaling, leading to the recruitment of activated Th1 lymphocytes to inflammatory sites, including tumors, brain injury, and viral or Toxoplasma gondii infections. In tumors, CXCL10-CXCR3 regulates immune cell activation, differentiation, and migration to promote anti-tumor immunity through paracrine signaling. The tumor-derived CXCL10 molecules, on the contrary, interact with CXCR3, thereby inducing cancer cell proliferation, tumor angiogenesis, and other pro-cancerous effects. During brain injury, the CXCL10/CXCR3 axis is involved in the activation and recruitment of microglia to the lesion sites, which is an essential element for neuronal reorganization. In experiments involving CXCL10-stimulated human PBMCs, NF-κB-overexpressing human umbilical vein endothelial cells (HUVECs), and CXCR3-expressing cells, in vitro treatment with eldelumab antibody is reported to neutralize the CXCL10 activity.

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

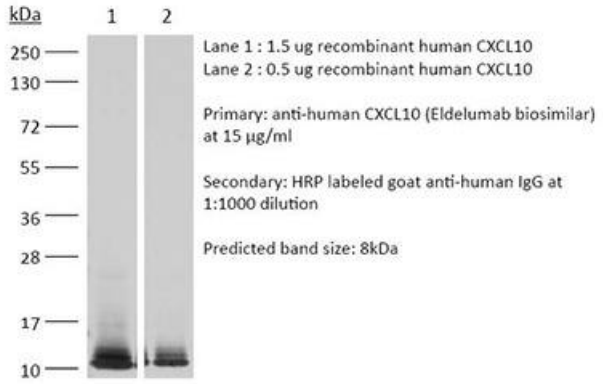
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/sim0076?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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