Technical Data Sheet

InVivoMAb anti-mouse CD96

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:	**BE0403**
Clone:	**6A6**
Isotype:	Rat IgG2a, λ
Recommended Isotype Control(s):	InVivoMAb rat IgG2a isotype control, anti-trinitrophenol
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	mCD96-hIgG fusion protein
Reported Applications:	*in vivo* blocking of CD96 *in vitro* blocking of CD96 Functional assays Flow cytometry
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<2EU/mg (<0.002EU/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 G
RRID:	
Molecular Weight:	150 kDa

Description

The 6A6 monoclonal antibody reacts with mouse CD96, also known as T cell activation increased late expression (TACTILE) in humans. CD96 is a type I transmembrane glycoprotein immunoglobulin (Ig) superfamily receptor with a complex extracellular domain having three Ig-like domains and one cytoplasmic domain. CD96 is expressed at low levels on resting NK cells and T cells and at high levels on activated NK and T cells. CD96 binds to its high-affinity ligand, the CD155/poliovirus receptor (PVR), thereby triggering T cell and NK cell adhesion and function. CD96 is also involved in the negative regulation of NK cell-mediated immune surveillance. CD96 has recently been identified as a novel target for cancer immunotherapy and has been shown to play a role in metastasis. In vitro experiments with CD96-blocking antibodies (clones 6A6 and 3.3) and a non-blocking antibody (clone 8B10) have established that the 6A6 antibody binds to the first Ig domain of murine CD96 with superior affinity and that the 6A6 antibody competes with CD155 binding, thereby blocking the CD96-CD155 interaction. In a mouse model of pancreatic ductal adenocarcinoma (PDAC), in vivo blockade of CD96 with 6A6 after neutralization of PD-1 with the RMP1-14 antibody led to the prevention of post-surgery PDAC recurrence while facilitating long-term survival. Mechanistic experiments with in vivo use of 6A6 and other CD96 antibodies on CD155-deficient mice and CD226-deficient mice showed that the CD96 antibodies need not block CD96-CD155 interactions to promote NK cell anti-metastatic activity in tumors.

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/be0403?bxcs=9k1b3a#tab_references or scan the QR code below.

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