Technical Data Sheet

*InVivo*MAb anti-mouse CTLA-4 (CD152)

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:	**BE0131**
Clone:	**9H10**
Isotype:	Syrian Hamster IgG
Recommended Isotype Control(s):	InVivoMAb polyclonal Syrian hamster IgG
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Mouse CTLA-4-human IgG1 fusion protein
Reported Applications:	*in vivo* CTLA-4 neutralization *in vitro* CTLA-4 neutralization Western blot
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 filtered
Production:	Purified from tissue culture supernatant in an animal free facility
Purification:	Protein G
RRID:	AB_10950184
Molecular Weight:	150 kDa

Description

The 9H10 monoclonal antibody reacts with mouse CTLA-4 (cytotoxic T lymphocyte antigen-4) also known as CD152. CTLA-4 is a 33 kDa cell surface receptor encoded by the *Ctla4* gene that belongs to the CD28 family of the Ig superfamily. CTLA-4 is expressed on activated T and B lymphocytes. CTLA-4 is structurally similar to the T-cell co-stimulatory protein, CD28, and both molecules bind to the B7 family members B7-1 (CD80) and B7-2 (CD86). Upon ligand binding, CTLA-4 negatively regulates cell-mediated immune responses. CTLA-4 plays roles in induction and/or maintenance of immunological tolerance, thymocyte development, and regulation of protective immunity. The critical role of CTLA-4 in immune down-regulation has been demonstrated in CTLA-4 deficient mice, which succumb at 3-5 weeks of age due to the development of a lymphoproliferative disease. CTLA-4 is among a group of inhibitory receptors being explored as cancer treatment targets through immune checkpoint blockade. The 9H10 antibody has been shown to promote T cell co-stimulation by blocking CTLA-4 binding to the B7 co-receptors, allowing for CD28 binding.

Shelf-life and Storage

Store at the stock concentration at 4°C. **Do not freeze.**
All Bio X Cell antibodies have a guaranteed shelf-life of one year from the date of customer receipt when stored as recommended. 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 bxcell.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://bxcell.com/product/m-cd152-m-ctla-4/#references or scan the QR code below.

Bio X Cell, Inc.

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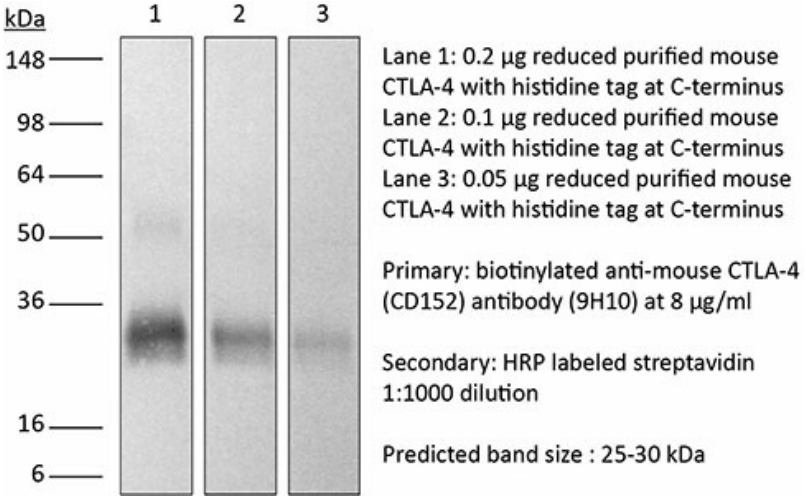
Binding Validation

Western blot data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, email technicalservice@bxcell.com.



Lane 1: 0.2 µg reduced purified mouse CTLA-4 with histidine tag at C-terminus
Lane 2: 0.1 µg reduced purified mouse CTLA-4 with histidine tag at C-terminus
Lane 3: 0.05 µg reduced purified mouse CTLA-4 with histidine tag at C-terminus

Primary: biotinylated anti-mouse CTLA-4 (CD152) antibody (9H10) at 8 µg/ml

Secondary: HRP labeled streptavidin 1:1000 dilution

Predicted band size : 25-30 kDa