



**Lot Specific Information**

<b>Lot Number:</b>	Lot Specific*
<b>Volume:</b>	Lot Specific*
<b>Concentration:</b>	Lot Specific* (generally 4 to 11 mg/ml) *
<b>Total Protein:</b>	Lot Specific*

\*This information will be noted on the certificate of analysis that ships with this product.

**Product Information**

<b>Catalog Number:</b>	<b>BE0016-2</b>
<b>Clone:</b>	<b>FGK4.5/ FGK45</b>
<b>Isotype:</b>	Rat IgG2a
<b>Recommended Isotype Control(s):</b>	InVivoMAb rat IgG2a isotype control, anti-trinitrophenol
<b>Recommended Dilution Buffer:</b>	InVivoPure pH 7.0 Dilution Buffer
<b>Immunogen:</b>	Recombinant mouse CD40 fusion protein <i>in vivo</i> CD40 activation <i>in vitro</i> B cell stimulation/activation
<b>Reported Applications:</b>	
<b>Formulation:</b>	PBS, pH 7.0 Contains no stabilizers or preservatives
<b>Endotoxin:</b>	<2EU/mg (<0.002EU/μg) Determined by LAL gel clotting assay
<b>Purity:</b>	>95% Determined by SDS-PAGE
<b>Sterility:</b>	0.2 μM filtered
<b>Production:</b>	Purified from tissue culture supernatant in an animal free facility
<b>Purification:</b>	Protein G
<b>RRID:</b>	AB_1107647
<b>Molecular Weight:</b>	150 kDa

**Description**

The FGK4.5 monoclonal antibody reacts with mouse CD40 also known as Bp50. CD40 is a 48 kDa type I transmembrane glycoprotein that belongs to the tumor necrosis factor receptor (TNFR) superfamily. CD40 is expressed broadly on antigen-presenting cells (APCs) such as dendritic cells, B cells, macrophages, and monocytes as well as non-immune endothelial cells, basal epithelial cells, and a range of tumors. Upon binding to its ligand CD154, CD40 acts as a costimulatory molecule for the activation of B cells, dendritic cells, monocytes, and other APCs. CD40 plays roles in B cell activation, differentiation, proliferation and Ig isotype switching as well as dendritic cell maturation. Agonistic CD40 monoclonal antibodies have been shown to activate APCs and promote anti-tumor T cell responses. The FGK4.5 antibody is an agonistic antibody that has been shown to activate CD40 expressing APCs. FGK4.5 can also be used to inhibit CD40/CD154 interaction *in vitro* and *in vivo*.

**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](http://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-cd40/#references> or scan the QR code below.

**Bio X Cell, Inc.**

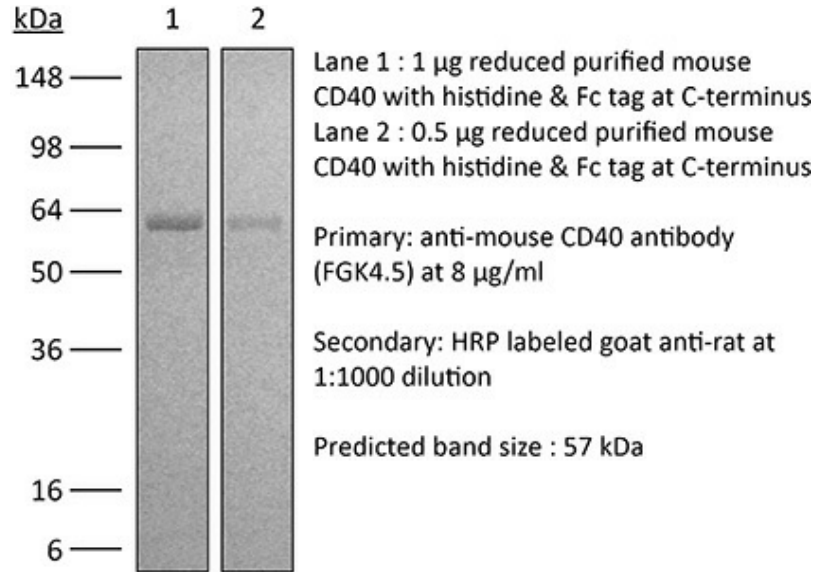
bxcell.com  
1.866.787.3444  
[customerservice@bxcell.com](mailto:customerservice@bxcell.com)

Conditions: For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.  
Bio X Cell, Bio X Cell Logo and all other trademarks are the property of Bio X Cell, Inc. © 2020 Bio X Cell



## 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](mailto:technicalservice@bxcell.com).



**Bio X Cell, Inc.**

bxcell.com  
1.866.787.3444

[customerservice@bxcell.com](mailto:customerservice@bxcell.com)

Conditions: For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

**Bio X Cell, Bio X Cell Logo and all other trademarks are the property of Bio X Cell, Inc. © 2020 Bio X Cell**