Anti-Mouse CD40 In Vivo Antibody – Low Endotoxin (FGK4.5) [ICH1073]

Description

Bulk anti-CD40 In Vivo Antibody – Low Endotoxin (FGK4.5)

Product Benefits:

ichorbio's anti-CD40 In Vivo Antibody – Low Endotoxin (FGK4.5) is manufactured in a cGMP compliant, ISO Quality Standard 9001:2015 facility. ichorbio's low endotoxin antibodies have half the endotoxin of comparable antibodies from our competitors at less than 1.0 EU/mg. If ichorbio's low endotoxin antibodies are not low enough we also offer ultra low endotoxin antibodies which have even less endotoxin (<0.75EU/mg) at an even higher purity (98% versus 95%). ichorbio offers Amazon vouchers or donations to the NC3Rs for reviews of this product: click here for more information. ichorbio: the best antibodies for *in vivo* research.

Target:

CD40

Clone:

FGK4.5

Isotype:

Rat IgG2a

Other Names:

CD40, FGK45

Uniprot:

P27548

Host:

Rat

Species Reactivity:

Mouse, Rat

Specificity:

Anti-CD40 In Vivo Antibody – Low Endotoxin (FGK4.5) recognizes an epitope on Mouse CD40

Purification Method:

This monoclonal antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype.

Antigen Distribution:

B cells, basal epithelial cells, macrophages, follicular dendritic cells, and endothelial cells

Background:

CD40, also known as TNFSF5, is a type I transmembrane protein and member of the TNF receptor family. The binding of CD40L (CD154) on TH cells to CD40 activates antigen presenting cells and induces a variety of downstream effects. CD40 is expressed on B cells, dendritic cells, monocytes, thymic epithelial cells and, at low levels, on T cells. Signaling though CD40 plays an important role in the proliferation and differentiation of B cells and is critical for immunoglobulin (Ig) class switching. The membrane-anchored CD40L is expressed almost exclusively on activated CD4+ T lymphocytes. Failure to express CD40L leads to “immunodeficiency with hyper-IgM”, a disease characterized by failure to produce IgG, IgA and IgE. Some of the early intracellular signaling by the CD4-CD40L system includes the association of the CD40 with TRAFs and the activation of various kinases (4). Adaptor protein TNFR2 interacts with this receptor and serves as a mediator of the signal transduction. The interaction of CD4-CD40L is found to be necessary for amyloid-beta-induced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis.

Immunogen:

Recombinant Mouse CD40 Fusion Protein

Concentration:

1.0 – 5.0 mg/ml

Formulation:

0.01 M phosphate buffered saline (PBS) pH 7.2, 150 mM NaCl with no carrier protein, potassium or preservatives added BSA and Azide free.

Purity:

>95% by SDS-PAGE and HPLC

>98% by SDS-PAGE and HPLC

Endotoxin:

<0.5 EU/mg as determined by the LAL method

? 0.75 EU/mg as determined by the LAL method

Aggregation:

Aggregation level ? 5%

Aggregation level ? 1%

IMPACT Pathogen Test:

We use the IMPACT test generated by IDEXX Laboratories to guarantee our Ultra Low Endotoxin antibodies are pathogen free. Our rat antibodies are tested for:
Mycoplasma spp
Mycoplasma pulmonis
Pneumonia virus of mice
Kilham's rat virus
Toolan's H1 virus
Rat parvovirus
Lymphocytic choriomeningitis virus
Rat cytomegalovirus
Sendai virus
Rat coronavirus
Sialodacryoadenitis virus
Rat minute virus
Seoul virus
Mouse adenovirus
Reovirus 3
Rat theilovirus

Storage:

This antibody is stable for at least 4 weeks when stored at 2-8°C. For long term storage, aliquot in working volumes without diluting and store at – 20°C or -80°C. Avoid repeated freeze thaw cycles.

Applications:

Western Blot, Functional Assays, Flow Cytometry

Application Notes:

Each investigator should determine their own optimal working dilution for specific applications.

Use:

Products are for research use only. Not for use in diagnostic or therapeutic procedures.

Isotype Control:

Rat IgG2a In Vivo Isotype Control – Low Endotoxin [1-1] (ICH2244)