



Anti-Mouse CD28 In Vivo Antibody – Low Endotoxin (37.51) [ICH1055]

Description

Bulk anti-CD28 In Vivo Antibody – Low Endotoxin (37.51)

Bio X Cell:

ICH1055 is [up to 30% cheaper](#) for academia & non-profits and [up to 55% cheaper](#) for industry than the equivalent product BE0015-1 from Bio X Cell.

Product Benefits:

ichorbio's anti-CD28 In Vivo Antibody – Low Endotoxin (37.51) 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: the best antibodies for *in vivo* research.

Target:

CD28

Clone:

37.51

Size:

ichorbio's 37.51 *in vivo* antibody is available in the following bulk sizes:

1mg, 5mg, 25mg, 50mg and 100mg

ichorbio regularly manufactures multi-gram amounts of our anti-CD28 37.51 clone – please contact us for pricing.

Isotype:

Syrian Hamster IgG

Host:

Syrian Hamster

Species Reactivity:

Mouse

Specificity:

Anti-CD28 In Vivo Antibody – Low Endotoxin (37.51) recognizes the CD28 co-stimulatory receptor, a ligand of CD80 (B7-1) and CD86 (B7-2). CD28 is important for transmitting co-stimulatory signals for optimal T-cell activation.

Antigen Distribution:

Anti-CD28 is present on most thymocytes, CD4+, CD8+ T-cells. The 37.51 antibody augments proliferation and IL-2 production by activated T-cells. Clone 37.51 antibody has been shown to stimulate the proliferation and cytokine production by activated T and NK cells and provide a costimulatory signal for CTL induction.

Background:

CD28 (Cluster of Differentiation 28) is one of the molecules expressed on T cells that provide co-stimulatory signals, which are required for T cell activation. CD28 is composed of a single Ig V-like extracellular domain, a transmembrane domain and an intracellular domain. It is expressed on the cell surface as disulfide-linked homodimer or as monomer. CD28 is the receptor for B7.1 (CD80) and B7.2 (CD86). When activated by Toll-like receptor ligands, the B7.1 expression is upregulated in antigen presenting cells (APCs). The B7.2 expression on antigen presenting cells is constitutive. CD28 is the only B7 receptor constitutively expressed on naive T cells. Stimulation through CD28 in addition to the TCR can provide a potent co-stimulatory signal to T cells for the production of various interleukins (IL-2 and IL-6 in particular). CD28 possesses an intracellular domain with several residues that are critical for its effective signalling. CD28 also contains two proline-rich motifs that are able to bind SH3-containing proteins. CD28 has also been found to stimulate eosinophil granulocytes where its ligation with anti-CD28 leads to the release of IL-2, IL4, IL-13 and IFN-gamma.

Immunogen:

C57BL/6 mouse T-cell lymphoma EL-4

Concentration:

1.0 – 5.0 mg/ml

Formulation:

20 mM Histidine pH 6.0 containing 150 mM NaCl. NOTE: A buffer exchange into PBS for conjugation and MES for functional assays may be required depending on your application.

Purity:

>95% by SDS-PAGE and HPLC

>98% by SDS-PAGE and HPLC

Endotoxin:

? 1.0 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 hamster antibodies are tested for:

Mycoplasma spp

Mycoplasma pulmonis

Pneumonia virus of mice

Kilham's rat virus

Toolan's H1 virus

Hamster parvovirus

Lymphocytic choriomeningitis

Minute virus of mice

Theiler's murine encephalomyelitis virus

Sendai virus

Reovirus 3

Hantaan virus

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:

Immunoprecipitation, Western Blot, Blocking, Functional Assays, Flow Cytometry, IHC (Frozen)

Application Notes:

Functional Assay: Anti-Mouse CD28 (clone 37.51) has been reported in costimulation of T cells In vitro

and In vivo.

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.

Antibodies against the same target:

[Anti-CD28 In Vivo Antibody – Low Endotoxin \[CD28.2\] \(ICH1013\)](#)