# ichorbio

# Bulk Anti-Human CD28 (CD28.2) Antibody

#### Bulk anti-human CD28 antibody (CD28.2)

### **Product Benefits:**

ichorbio's anti-human CD28 antibody (CD28.2) 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 <u>Bio</u> <u>X Cell</u> 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 (<0.5EU/mg) at an even higher purity (98% versus 95%). ichorbio: the best antibodies for *in vivo* research.

Target:
CD28
Clone:
CD28.2
Isotype:
Mouse IgG1
Other Names:
TP44
Uniprot:
<u>P10747</u>
Host:
Mouse
Species Reactivity:
Human
Specificity:
Bulk anti-human CD28 antibody (CD28.2) recognizes an epitope on Human CD28
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.

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# **Antigen Distribution:**

Mature T cells, thymocytes, NK cell subsets, plasma cells, EBV-positive B cells

# **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 **Concentration:** 

1.0 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:**

>90% by SDS-PAGE and HPLC

>98% by SDS-PAGE and HPLC

#### **Endotoxin:**

<0.1 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%

#### 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  $-20^{\circ}$ C or  $-80^{\circ}$ C. Avoid repeated freeze thaw cycles.

#### **Applications:**

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IHC (Frozen), Flow Cytometry, Functional Assays

# **Application Notes:**

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

Use:

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# **Isotype Control:**

Mouse IgG1 Isotype Control for In Vivo - Low Endotoxin [HKSP] (ICH2247)

# Antibodies against the same target:

Anti-CD28 In Vivo Antibody - Ultra Low Endotoxin [37.51] (ICH1055UL), Anti-CD28 In Vivo Antibody - Low Endotoxin [37.51] (ICH1055)

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