

# Bulk Anti-Human CD38 (OKT10) Antibody

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ichorbio's bulk anti-human CD38 antibody (OKT10) 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 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.

ichorbio: the best antibodies for <i>in vivo</i> research.				
Target:				
CD38				
Clone:				
OKT10				
Isotype:				
Mouse IgG1				
Other Names:				
ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1, ADPRC 1, I-19, NIM-R5				
Uniprot:				
<u>P56528</u>				
Host:				
Mouse				
Species Reactivity:				
Mouse				
Specificity:				
Clone OKT10 recognizes an epitope on human CD38.				

## **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:**

ichor.bio // hello@ichor.bio

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CD38 is present on the surface of immune cells such as CD4+, CD8+, B lymphocytes, natural killer cells, mature lymphocytes, and mature lymphoplasmacytic cells.

### **Background:**

CD38 is a 45kD type II transmembrane glycoprotein that plays a role in the regulation of intracellular Ca2+ by synthesizing and hydrolyzing an intracellular calcium ion mobilizing messenger. CD38 has both extracellular and intracellular functions as indicated by the release of soluble protein and the ability of membrane-bound protein to become internalized. The functional molecule is a dimer that contains the catalytic site in the central portion, and is involved in both extracellular and intracellular functions. CD38 plays a role in cell adhesion, signal transduction and calcium signaling. CD38 has been used as a biomarker to measure the progress of a chronic lymphocytic leukemia in patients. Because CD38 is expressed on mature lymphocytes and lymphoplasmacytic cells, OKT10 can be used to study final B cell maturation. OKT10 reactivity with CD38 occurs in an inversely proportional relationship to the occurrence of Ia-like antigenic expression. Hence, these two antigens can be used as reciprocal complementary reactants for the study of mature B cell malignancies, such as CLL, multiple myeloma, and Waldenström malignancy.

#### **Concentration:**

1.0 mg/ml

#### **Formulation:**

This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (PBS) pH 7.2 - 7.4, 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:**

? 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 mouse antibodies are tested for: Mycoplasma spp. Mycoplasma pulmonis Sendai virus Mouse hepatitis virus Pneumonia virus of mice Minute virus of mice Mouse parvovirus (MPV1-5) Theiler's murine encephalomyelitis virus Murine norovirus Reovirus 3 Mouse rotavirus Ectromelia virus Lymphocytic



choriomeningitis virus Polyoma virus Lactate dehydrogenase-elevating virus Mouse adenovirus (MAD1, MAD2) Mouse cytomegalovirus K virus Mouse thymic virus Hantaan virus Corynebacterium bovis Corynebacterium spp. (HAC2)

# 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:**

Flow cytometry

# **Application Notes:**

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

Use:

Products are for research use only.