

TECHNICAL DATA SHEET

In Vivo Ready™ Anti-Mouse / Rat CD40 (HM40-3)

Catalog Number: 40-0402

PRODUCT INFORMATION

Contents: In Vivo Ready™ Anti-Mouse / Rat CD40 (HM40-3)

Isotype: Armenian Hamster IgM, kappa

Concentration: 2 mg/mL

Clone: HM40-3

Reactivity: Mouse, Rat

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, pH7.2

Endotoxin Level: Less than or equal to 0.01 EU/ug, as determined by the LaL assay

DESCRIPTION

The HM40-3 antibody reacts with both mouse and rat CD40, 45-50 kDa transmembrane glycoprotein receptors which are part of the TNFR family. CD40 is constitutively expressed by a wide variety of cells types, including B cells, antigen presenting cells, and tumor cells. It functions as a co-stimulatory receptor upon engagement by its ligand, CD40L (CD154). This signaling pair plays a key role during B cell development for induction of Ig class switching and in protecting B cells from BCR-mediated apoptosis. CD40 activates resting B cells following BCR-mediated antigen presentation to T cells expressing CD40L, and provides a secondary signal for macrophages in their response to Th1 cell-expressed IFN gamma and CD40L. The HM40-3 antibody may be used for analysis of CD40 expression by flow cytometry, and is also widely used for activation of CD40-expressing cells in vitro / in vivo.

PREPARATION & STORAGE

This monoclonal antibody preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

APPLICATION NOTES

This purified format is guaranteed to be >90% pure as determined by SDS-PAGE analysis. Citations are provided as a convenience to you - please consult Materials and Methods sections for additional details about the use of any product in these publications.

REFERENCES

Misharin AV, Saber R, and Perlman H. 2012. J. Leukoc. Biol. 92: 325-331. (flow cytometry) de Andres B, Prado C, Palacios B, Alia M, Jagtap S, Serrano N, Cortegano I, Marcos MAR, and Gaspar ML. 2012. J. Immunol. 189: 2300-2308. (in vitro activation) Maseda D, Smith SH, DiLillo DJ, Bryant JM, Candando KM, Weaver CT, and Tedder TF. 2012. J. Immunol. 188: 1036-1048. (in vitro activation)

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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