TECHNICAL DATA SHEET

Purified Anti-Mouse CD28 (37.51)

Catalog Number: 70-0281

PRODUCT INFORMATION

Contents: Purified Anti-Mouse CD28 (37.51)

Isotype: Golden Syrian Hamster IgG

Concentration: 0.5 mg/mL

Clone: 37.51

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, pH7.2

DESCRIPTION

The 37.51 antibody reacts with mouse CD28, a 45 kDa glycoprotein which acts as a co-stimulatory receptor in support of the T cell receptor (TCR). CD28 exists as a homodimer with specificity for two known ligands, known as B7-1 (CD80) and B7-2 (CD86), expressed on activated B cells and antigen-presenting cells. These ligands trigger CD28 signaling in concert with TCR activation to drive T cell proliferation, induce high-level expression of IL-2, impart resistance to apoptosis, and enhance T cell cytotoxicity. The interaction / co-stimulatory signaling between the B7 ligands and CD28 provides crucial communication between T cells and B cells or APCs to coordinate the adaptive immune response. Other members of the CD28 family of co-stimulatory receptors include CTLA-4 (CD152), PD-1 (CD279), ICOS and BTLA.The 37.51 may be used as a phenotypic marker for CD28, which is expressed on all CD4+ T cells and CD8+ T cells, and on NK cells in mouse. In addition, the 37.51 antibody is widely used to activate the CD28 receptor in vitro and 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

Johnston RJ, Choi YS, Diamond JA, Yang JA, and Crotty S. 2012. J. Exp. Med. 209:243-250. (in vitro activation)Hafalla JCR, Burgold J, Dorhoi A, Gross O, Ruland J, Kaufmann SHE, and Matuschewski K. 2012. Infect. Immun. 80:1274-1279. (in vitro activation)Driessens G, Zheng Y, Locke F, Cannon JL, Gounari F, and Gajewski TF. 2011. J. Immunol. 186:784-790. (flow cytometry)Alcazar I, Cortes I, Zaballos A, Hernandez C, Fruman DA, Barber DF, and Carrera AC. 2009. Blood. 113:3198-3208. (immunoprecipitation, in vitro activationAlbert MH, Yu X-Z, Martin PJ, and Anasetti C. 2005. Blood. 105:1355-1361. (in vivo 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.