TECHNICAL DATA SHEET

Purified Anti-Human CD152 (CTLA-4) (BNI3)

Catalog Number: 70-1529

PRODUCT INFORMATION

Contents: Purified Anti-Human CD152 (CTLA-4) (BNI3)

Isotype: Mouse IgG2a, kappa

Concentration: 0.5 mg/mL

Clone: BNI3

Reactivity: Human

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

DESCRIPTION

The BNI3 antibody is specific for human CD152, commonly known as CTLA-4, a 33-37 kDa protein expressed as a homodimer on the surface of activated T and B cells, and on thymocytes. CTLA-4 is structurally similar, yet functionally disparate, to the T cell co-stimulatory molecule CD28. Both CTLA-4 and CD28 interact with the co-stimulatory molecules CD80 (B7-1) and CD86 (B7-2) on antigen-presenting cells, with CTLA-4 displaying a higher avidity than CD28. While CD28 typically delivers a potent co-stimulatory signal in support of T cell activation, CTLA-4 appears to act as a negative regulator of T cell activation and may contribute to the suppressor function of Treg cells. CTLA-4 proteins may be initially sequestered within Golgi vesicles, from which they can be transferred to and from the cell surface, a mechanism by which Treg cells can selectively impart suppressive functions. The BNI3 antibody may be used for flow cytometric analysis of intracellular or surface CTLA-4 expression, and is also widely used for neutralization of CTLA-4 when expressed at the cell surface. The BNI3 antibody is reported to be cross-reactive with Baboon, Cynomolgus and Rhesus CTLA-4.

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

Moreno-Fernandez ME, Rueda CM, Rusie LK, and Chougnet CA. 2011. Blood. 117: 5372-5380. (in vitro blocking)Schonfeld D, Matschiner G, Chatwell L, Trentmann S, Gille H, Hulsmeyer M, Brown N, Kaye PM, Schlehuber S, Hohlbaum AM and Skerra A. 2009. 106: 8198-8203. (immunohistochemistry – frozen tissue)Rivas MN, Weatherly K, Hazzan M, Vokaer B, Dremier S, Gaudray F, Goldman M, Salmon I, and Braun MY. 2009. 183:4284-4291. (in vitro blocking)Bonzheim I, Geissinger E, Tinguely M, Roth S, Grieb T, Reimer P, Wilhelm M, Rosenwald A, Muller-Hermelink HK, and Rudiger T. 2008. Am. J. Clin. Pathol. 130: 613-619. (immunohistochemistry – paraffin embedded tissue - immunofluorescence microscopy – frozen tissue)Young NT, Waller ECP, Patel R, Roghanian A, Austyn JM, and Trowsdale J. 2008. 111: 3090-3096. (in vitro activation)Wei B, da Rocha Dias S, Wang H and Rudd CE. 2007. J. Immunol. 179: 400-408. (in vitro activation)Jonuleit H, Schmitt E, Stassen M, Tuettenberg A, Knop J and Enk AH. 2001. J. Exp. Med. 193: 1285-1294 (in vitro blocking)Oaks MK and Hallett KM. 2000. J. Immunol. 164: 5015-5018. (immunoprecipitation - EIA – plate coating)

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.