

**In Vivo Ready™ Anti-Human CD152 (CTLA-4) (BNI3) Antibody**  
**Catalog # ATB10397****Specification****In Vivo Ready™ Anti-Human CD152 (CTLA-4) (BNI3) Antibody - Product Information**

Application	FC, FA
Isotype	Mouse IgG2a, kappa
Concentration	2.0 mg/mL
Reactivity	Human
Formulation	10 mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, pH7.2
Host	Mouse

**In Vivo Ready™ Anti-Human CD152 (CTLA-4) (BNI3) Antibody - Additional Information**

Gene ID	1493
Gene Name	CTLA4
Alternative Name(s)	
CTLA4	

**Format**

In Vivo Ready™

**Storage Conditions**

2-8°C

**In Vivo Ready™ Anti-Human CD152 (CTLA-4) (BNI3) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**In Vivo Ready™ Anti-Human CD152 (CTLA-4) (BNI3) Antibody - Images****In Vivo Ready™ Anti-Human CD152 (CTLA-4) (BNI3) Antibody - Background**

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. Please choose the appropriate format for each application.

### **In Vivo Ready™ Anti-Human CD152 (CTLA-4) (BNI3) Antibody - 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, Hulsmeier 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)