TECHNICAL DATA SHEET

In Vivo Ready™ Anti-Mouse IL-12/IL-23 p40 (C17.8)

Catalog Number: 40-7123

PRODUCT INFORMATION

Contents: In Vivo Ready™ Anti-Mouse IL-12/IL-23 p40 (C17.8)

Isotype: Rat IgG2a, kappa

Concentration: 2 mg/mL

Clone: C17.8

Reactivity: Mouse

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 C17.8 antibody is specific for the 40 kDa (p40) protein subunit shared by the cytokines IL-12 and IL-23. To form IL-12, p40 assembles with a separate 35 kDa protein, known as p35, resulting in a 70 kDa functional cytokine. IL-12 is secreted by activated monocytes, macrophages, and dendritic cells, and has been shown to target naive, resting CD4+ T cells to promote their proliferation and secretion of cytokines. IL-23 contains the p40 subunit in combination with a 19 kDa protein chain, p19 - its primary source being activated dendritic cells and other antigen-presenting cells. IL-23 appears to target different cell types than IL-12, acting on memory CD4+ T cells to induce a strong proliferative response and contributing to the generation and expansion of Th17 cells. Like the cytokines themselves, the receptors for IL-12 and IL-23 share one subunit, as well as containing distinct cytokine-specific subunits.As the C17.8 antibody binds to a shared subunit of both IL-12 and IL-23, it may be used as a marker for either IL-12 or IL-23 expression in dendritic cells, monocytes and macrophages, and is widely used for neutralization of activity associated with either cytokine.

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

Dong H, Franklin NA, Roberts DJ, Yagita H, Glennie MJ and Bullock TNJ. 2012. J. Immunol. 188: 3829-3838. (in vivo blocking)Prabhakara R, Harro JM, Leid JG, Keegan AD, Prior ML, and Shirtliff ME. 2011. Infect. Immun. 79: 5010-5018. (in vivo blocking)Chmielewski M, Kopecky C, Hombach AA, and Abken H. 2011. Cancer Res. 71: 5697-5706. (ELISA)Lo C-H, Lee S-C, Wu P-Y, Pan W-Y et al. 2003. J. Immunol. 171: 600-607. (immunoprecipitation)Belladonna ML, Renauld J-C, Bianchi R, Vacca C, Fallarino F, Orabona C, Fioretti MC, Grohmann, and Puccetti P. 2002. J. Immunol. 168: 5448-5454. (western blot)Ludviksson BR, Ehrhardt RO, and Strober W. 1999. J. Immunol. 163: 4349-4359. (immunofluorescence microscopy – frozen tissue)Kato K, Shimozato O, Hoshi K, Wakimoto H, Hamada H, Yagita H, and Okumura K. 1996. Proc. Natl. Acad. Sci. 93:9085-9089. (immunoprecipitation - ELISA)Wysocka M, Kubin M, Vieira LQ, Ozmen L, Garotta G, Scott P and Trinchieri G. 1995. Eur. J. Immunol. 25: 672-676. (Origination of clone - immunoprecipitation, western blot)

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.