CD80 Mouse Monoclonal Antibody

E10-20341

Background: The protein CD80 (Cluster of Differentiation 80) is a molecule found on activated B cells and monocytes which provides a costimulatory signal necessary for T cell activation and survival. It is also known as B7.1. Its principal mode of action is by binding to CD28. Along with CD86, these molecules provide the necessary stimuli to prime T cells against antigens presented by antigen-presenting cells. CD80 and CD86 also bind to CTLA-4, a cell surface molecule expressed on activated T cells. Interactions between CD80 or CD86 with CTLA-4 decrease the response of T cells. Mouse research by scientists at Emory University showed that estrogen-related bone loss is linked to recently discovered pathways involving various proteins, such as CD80 and other functions. In a nutshell, reactive oxygen stimulates dendritic cells, which activate other immune cells to up-regulate production of CD80, the molecule co-responsible for T cell activation. "When this pathway is activated, it leads to increased T cell TNF production and ultimately to bone loss." In turn, T cells produce a protein, Tumor Necrosis Factor, which increases the formation of osteoclasts in rodents and humans.

Catalog Number: E10-20341

Amount: 100µg/100µl

Clone Number: 2A2

Species: Mouse IgG1

MW: 55kDa

Aliases: CD28LG; LAB7; B7.1

Entrez Gene: 941

Immunogen: Purified recombinant fragment of CD80 expressed in E. Coli.

Storage: Store at 4 °C for 1 month. For long term storage, store at -20 °C.

Formulation: Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human

Tested Applications: IF,IHC,ELISA. Not yet tested in other applications. Determining optimal working dilutions by titration test.

Application notes: IHC.1/200 - 1/1000.IF.1/200 - 1/1000.ELISA. Propose dilution 1/10000.

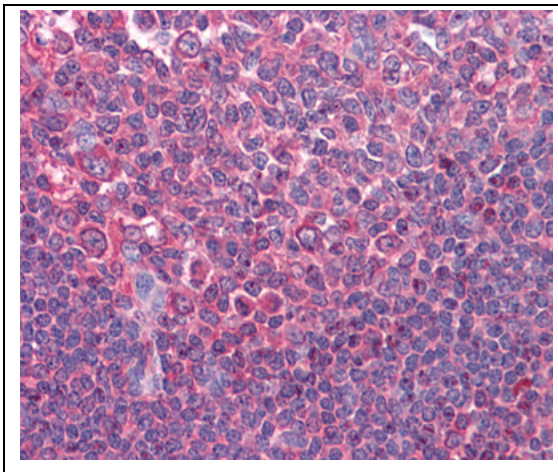

Figure 1. Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using anti-CD80 mAb

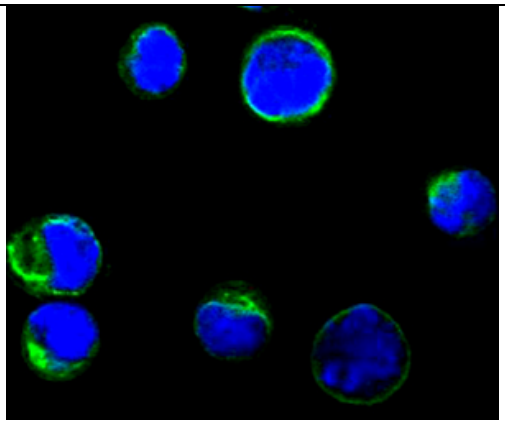

Figure 2. Confocal immunofluorescence analysis of BCBL-1 cells using anti-CD80 monoclonal antioby(green), showing membrane localization. Blue. DRAQ5 fluorescent DNA dye.

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