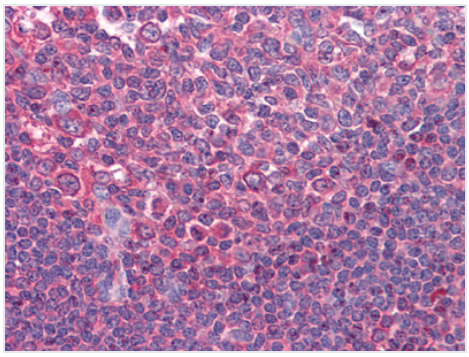
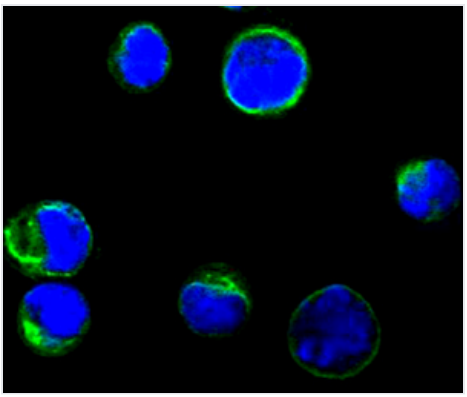
CD80 Antibody – Mouse

PRODUCT OVERVIEW

Product Name	CD80, Antibody
Full Product Name	CD80 Antibody
Product Gene Name	anti-CD80 antibody
Product Synonym Names	CD28LG; LAB7; B7.1
Isotype	IgG1
Clone Number	2A2
Host	Mouse
Species Reactivity	Human
Form/Format	Ascitic fluid containing 0.03% sodium azide.
Preparation and Storage	Store at 4 degree C, for long term storage, store at-20 degree C
Molecular Weight	55kDa
OMIM	112203
3D Structure	ModBase 3D Structure for P33681
Immunogen	Purified recombinant fragment of CD80 expressed in E. Coli.
Product Categories/Family for anti-CD80 antibody	Autophagy antibody; Cancer; Cardiovascular; Cell Biology; Epigenetics & Nuclear Signaling; Developmental Biologys; Immunology; Drug Discovery Products; Metabolism; Neuroscience; Signal Transduction; Stem Cells
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CD80 antibody	Immunofluorescence (IF), Immunohistochemistry (IHC), ELISA (EIA)
Application Notes for anti-CD80 antibody	IHC: 1:200-1:1000 IF: 1:200-1:1000 ELISA: 1:10000
Related Product Information for anti-CD80 antibody	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.
Other Notes	Small volumes of anti-CD80 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CD80 purchase	MBS850069 is an antibody targeting CD80. Also known as CD80 Antibody. Reactive in Human. Host: Mouse.



Immunohistochemistry (IHC) of anti-CD80 antibody
Figure 1. Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using anti-CD80 mAb



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

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD80. It may not necessarily be applicable to this product.

NCBI GI #	4885123
NCBI GeneID	941
NCBI Accession #	NP_005182.1
UniProt Primary Accession #	P33681
UniProt Secondary Accession #	Q5DTA9; Q5DTB0
UniProt Related Accession #	P33681
GenBank Nucleotide #	NM_005191.3
NCBI Official Full Name	T-lymphocyte activation antigen CD80
NCBI Official Synonym Full Names	CD80 molecule
NCBI Official Symbol	CD80
NCBI Official Synonym Symbols	B7; BB1; B7-1; B7.1; LAB7; CD28LG; CD28LG1
UniProt Protein Name	T-lymphocyte activation antigen CD80
UniProt Synonym Protein Names	Activation B7-1 antigen; BB1; CTLA-4 counter-receptor B7.1; B7; CD_antigen: CD80
Protein Family	T-lymphocyte activation antigen
UniProt Gene Name	CD80
UniProt Synonym Gene Names	CD28LG; CD28LG1; LAB7; B7
NCBI Protein Information	T-lymphocyte activation antigen CD80
NCBI Summary for CD80	The protein encoded by this gene is a membrane receptor that is activated by the binding of CD28 or CTLA-4. The activated protein induces T-cell proliferation and cytokine production. This protein can act as a receptor for adenovirus subgroup B and may play a role in lupus neuropathy. [provided by RefSeq, Aug 2011]
UniProt Comments for CD80	Involved in the costimulatory signal essential for T-lymphocyte activation. T-cell proliferation and cytokine production is induced by the binding of CD28, binding to CTLA-4 has opposite effects and inhibits T-cell activation.
Research Articles on CD80	**1.** Increased expressions of TLR-3, TLR-4 and CD80 mRNA and the level of urinary CD80/creatinine could be useful markers to differentiate patients of steroid-sensitive nephrotic syndrome in relapse from those with steroid-resistant nephrotic syndrome.

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