



Anti-CD86 polyclonal antibody [Biotin] (DPABY-669)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

B7-1 and B7-2, together with their receptors CD28 and CTLA4, constitute one of the dominant costimulatory pathways that regulate T and B cell responses. Although both CTLA4 and CD28 can bind to the same ligands, CTLA4 binds to B7-1 and B7-2 with a 20-100 fold higher affinity than CD28 and is involved in the down-regulation of the immune response. B7-1 is expressed on activated B cells, activated T cells, and macrophages. B7-2 is constitutively expressed on interdigitating dendritic cells, Langerhans cells, peripheral blood dendritic cells, memory B cells, and germinal center B cells. Additionally, B7-2 is expressed at low levels on monocytes and can be upregulated through interferon gamma. B7-1 and B7-2 are both members of the immunoglobulin superfamily. Human B7-2 is a 329 amino acid (aa) protein containing a putative 23 aa signal peptide, a 224 aa extracellular domain, a 21 aa transmembrane domain, and a 61 aa cytoplasmic domain. Human B7-2 and B7-1 share 26% amino acid identity. Human and mouse B7-2 share 50% amino acid identity. However, it has been observed that both human and mouse B7-1 and B7-2 can bind to either human or mouse CD28 and CTLA4, suggesting that there are conserved amino acids which form the B7-1/B7-2/CD28/CTLA4 critical binding sites.

Specificity

Detects ratB7-2/CD86 in ELISAs and Western blots. In sandwich immunoassays, approximately 50% cross-reactivity with recombinant mouse (rm)B7-2 is observed, 10% cross-reactivity with recombinant human B7-2 is observed, and less than 1% cross-reactivity with rmB7-1, rmB7-H1, rmB7-H3, and rmPD-L2 is observed.

Immunogen

Mouse myeloma cell line NS0-derived recombinant rat B7-2/CD86. Met1-Ile250 Accession Number NP_064466

Isotype

IgG

Source/Host

Goat

Species Reactivity

Rat

Purification	Antigen Affinity-purified
Conjugate	Biotin
Applications	Western Blot, Immunohistochemistry, ELISA Detection (Matched Pair)
Format	Liquid
Size	50 µg
Buffer	Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.
Preservative	None
Storage	Lyophilized samples are stable for twelve months from date of receipt when stored at -20 °C to -70 °C. Upon reconstitution, the antibody can be stored at 2 °C to - 8 °C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at - 20 °C to -70 °C in a manual defrost freezer for six months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	Cd86 CD86 molecule [Rattus norvegicus (Norway rat)]
Official Symbol	CD86
Synonyms	CD86; CD86 molecule; B7-2; T-lymphocyte activation antigen CD86; cd86 antigen; membrane glycoprotein;
Entrez Gene ID	56822
Protein Refseq	NP_064466
UniProt ID	O35531
Chromosome Location	11q22
Pathway	Adaptive Immune System; Allograft rejection; Autoimmune thyroid disease; CD28 co-stimulation; CD28 dependent PI3K/Akt signaling; CD28 dependent Vav1 pathway; CTLA4 inhibitory signaling; Cell adhesion molecules (CAMs);
Function	receptor binding;