Recombinant Human CD86, Fc-tagged

Cat. No. CD86-132H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The extracellular domain of human CD86 (aa 20-239) is fused to the N-terminus of the Fc region of human IgG1.
Species	Human
Source	CHO
ProteinLength	20-239 a.a.
Description	CD86 (B7-2) is a 60-100 kDa variably glycosylated protein in the B7 family. B7 family members are transmembrane cell surface molecules that play important roles in immune activation and the maintenance of immune tolerance. B7-2 is highly expressed on activated antigen presenting cells (APC), e.g. B cells, dendritic cells and monocytes as well as on vascular endothelial cells. B7-2 and the closely related CD80 (B7-1) exhibit overlapping but distinct functional properties. Their binding to CD28, which is constitutively expressed on T cells, enhances T cell receptor signaling and also provides TCR-independent costimulation. B7-1 and B7-2 additionally bind the CD28-related protein CTLA-4, which is up-regulated and recruited to the immunological synapse (IS) at the onset of T cell activation. CTLA-4 ligation inhibits the T cell response and supports regulatory T cell function. B7-2 is expressed earlier than B7-1 following APC activation and both proteins bind with higher affinity to CTLA-4 than to CD28. B7-2 promotes the stabilization of CD28 in the IS, while B7-1 is primarily responsible for promoting CTLA-4 recruitment and accumulation in the IS. The relative participation of B7-1 and B7-2 in T cell costimulation can also alter the

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	Th1/Th2 bias of the immune response. Both B7-1 and B7-2 serve as cellular receptors for B species adenoviruses.
Form	Lyophilized from 0.2μm-filtered solution in PBS.
Purity	≥98% (SDS-PAGE)
Stability	Stable for at least 1 year after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.
Storage	Short Term Storage: +4°C; Long Term Storage: -20°C. Avoid freeze/thaw cycles.

GENE INFORMATION

Gene Name	CD86 CD86 molecule [Homo sapiens]
Official Symbol	CD86
Synonyms	CD86; CD86 molecule; CD28LG2, CD86 antigen (CD28 antigen ligand 2, B7 2 antigen); T-lymphocyte activation antigen CD86; B lymphocyte antigen B7 2; B7 2; B7.2; BU63; FUN-1; CTLA-4 counter-receptor B7.2; B-lymphocyte activation antigen B7-2; CD86 antigen (CD28 antigen ligand 2, B7-2 antigen); B70; B7-2; LAB72; CD28LG2; MGC34413;
Gene ID	942
mRNA Refseq	NM_001206924
Protein Refseq	NP_001193853
MIM	601020

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	P42081
Chromosome Location	3q21
Pathway	Adaptive Immune System, organism-specific biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved biosystem; CD28 co-stimulation, organism-specific biosystem; CD28 dependent PI3K/Akt signaling, organism-specific biosystem;
Function	coreceptor activity; protein binding; receptor activity;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA