Active Recombinant Mouse Cd274 Protein, Fc-tagged, Alexa Fluor 488 conjugated

Cat. No. Cd274-1707MAF488 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse B7-H1 Protein extracellular domain, was expressed in NSO cells with C-terminal human IgG1 Fc tag (fused via linker peptide) and Alexa Fluor 488 conjugate.
Species	Mouse
Source	Mammalian Cells
Description	B7-H1, also called programmed death ligand (PD-L1) is a protein in the B7 family of immune proteins. PD-L1 binds to its receptor, PD-1, found on activated T cells, B cells, and myeloid cells, to modulate activation or inhibition. Engagement of PD-L1 with PD-1 on T cells delivers a signal that inhibits TCR-mediated activation of IL-2 production and T cell proliferation. The mechanism involves inhibition of ZAP-70 phosphorylation and its association with CD247. PD-L1 signaling attenuates PKC-8 activation loop phosphorylation (resulting from TCR signaling), necessary for the activation of transcription factors NF-kappa;B and AP-1 and for the production of IL-2. Upon IFN-gamma; stimulation, PD-L1 is expressed on T cells, NK cells, macrophages, myeloid DCs, B cells, epithelial cells, and vascular endothelial cells. Type I interferons can also upregulate PD-L1 on murine hepatocytes, monocytes, DCs, and tumor cells. It appears that upregulation of PD-L1 is a mechanism that cancers can employ to evade the host immune system as patients with higher expression levels of PD-L1 had a significantly poorer prognosis.

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Form	Lyophilized
Bio-activity	The biological activity of Mouse B7-H1 was determined by its ability to inhibit anti-CD3 induced proliferation of 72 hour PHA T cell blast. The expected ED50 for this effect is typically 2.5-10 μg/mL.
Molecular Mass	The predicted molecular weight of Recombinant Mouse B7-H1 is Mr 51.3 kDa (monomer). However, the actual molecular weight as observed by migration on SDS Page is Mr 75-85 kDa.
Endotoxin	< 1.0 EU/ μg as determined by the LAL method
Purity	> 90 % by SDS-PAGE and analyzed by silver stain
Characteristic	Disulfide-linked homodimer Labeled with Alexa Fluor 488 via amines Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Storage	This lyophilized protein is stable for six to twelve months when stored desiccated at -20 to -70 centigrade. After aseptic reconstitution, this protein may be stored at 2 to 8 centigrade for one month or at -20 to -70 centigrade in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles.
Storage Buffer	This recombinant protein was 0.2 μm filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1 × PBS) pH 7.2–7.3 with no calcium, magnesium, or preservatives.
Conjugation	Alexa Fluor 488

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GENE INFORMATION

Gene Name	Cd274 CD274 antigen [Mus musculus (house mouse)]
Official Symbol	Cd274
Synonyms	Cd274; B7h1; Pdl1; Pdcd1l1; Pdcd1lg1; A530045L16Rik; CD274 antigen; programmed cell death 1 ligand 1; B7 homolog 1; PDCD1 ligand 1; programmed death ligand 1
Gene ID	60533
mRNA Refseq	NM_021893
Protein Refseq	NP_068693
UniProt ID	Q9EP73

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