



Anti-Human B7-H1/PD-L1 Fc

20171219BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-P23
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of rabbits pre-immunized with highly pure recombinant B7-H1/PD-L1 Fc. Anti-human B7-H1/PD-L1 Fc-specific antibody was purified by affinity chromatography employing an immobilized B7-H1/PD-L1 Fc matrix.

Target Background

Synonyms (Target):	Programmed Death Ligand 1, Programmed cell death 1 Ligand 1 (PDCD1L1), PD-1, B7-H1 (B7 homolog 1), CD274, SLEB2, SLE1
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Human B7 homolog 1 (B7H1), also called programmed death ligand 1 (PDL1) and programmed cell death 1 ligand 1 (PDCD1L1), is a member of the growing B7 family of immune proteins that provide signals for both stimulating and inhibiting T cell activation. Other family members include B71, B72, B7H2, PDL2 and B7H3. B7 proteins are members of the immunoglobulin (Ig) superfamily, their extracellular domains contain 2 Ig-like domains and all members have short cytoplasmic domains. Among the family members, they share about 20-25% amino acid identity. Human and mouse B7H1 share approximately 70% amino acid sequence identity. B7H1 has been identified as one of two ligands for programmed death 1 (PD1), a member of the CD28 family of immunoreceptors. The B7H1 gene encodes a 290 amino acid (aa) type I membrane precursor protein with a putative 18 aa signal peptide, a 221 aa extracellular domain, a 21 aa transmembrane region, and a 31 aa cytoplasmic domain. Human B7H1 is constitutively expressed in several organs such as heart, skeletal muscle, placenta and lung, and in lower amounts in thymus, spleen, kidney and liver. B7H1 expression is upregulated in a small fraction of activated T and B cells and a much larger fraction of activated monocytes. B7H1 expression is also induced in dendritic cells and keratinocytes after IFN γ stimulation. Interaction of B7H1 with PD1 results in inhibition of TCR-mediated proliferation and cytokine production. The B7H1: PD1 pathway is involved in the negative regulation of some immune responses and may play an important role in the regulation of peripheral tolerance.

Database References Target

Protein RefSeq:	NP_054862.1
Uniprot ID:	Q9NZQ7
mRNA RefSeq:	NM_014143.3

Product Specifications

Species reactivity	Human
Clone/Ab feature	Rabbit IgG
Cross reactivity	Human
Host	Rabbit
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	highly pure recombinant PD-L1 Fc
Formulation	lyophilized from PBS
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Western Blot: To detect Human B7-H1/PD-L1 Fc by Western Blot analysis this antibody can be used at a concentration of 0.1-0.2 µg/ml. When used in conjunction with compatible secondary reagents, the detection limit for Recombinant Human B7-H1/PD-L1 Fc is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

ELISA: To detect B7-H1/PD-L1 Fc by Sandwich ELISA (using 100µl/well) a concentration of 0.5 – 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of 2 - 4 ng/well of recombinant B7-H1/PD-L1 Fc.

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!