CD Creative Diagnostics®

Recombinant Human PD-L1 (ECD) Protein [His] (DAGC412)

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

PRODUCT INFORMATION

Product Overview	A DNA sequence encoding the N-terminal segment (Met 1-Thr 239) of the extracellular domain of human B7-H1 (NP_054862.1) was expressed with a C-terminal polyhistidine tag.
Species	Human
Purity	> 98 % as determined by SDS-PAGE
Conjugate	His
Applications	ELISA
Predicted N terminal	Phe 19
Molecular Weight	The recombinant mature human B7-H1 comprises 232 amino acids and predicts a molecular mass of 26.8 kDa. As a result of glycosylation, the human B7-H1 migrates as an approximately 35-38 kDa protein in SDS-PAGE under reducing conditions.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method
Format	Lyophilized
Size	100 µg, 200 µg
Buffer	Lyophilized from sterile PBS, pH 7.4
Preservative	None
Storage	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

BACKGROUND

Introduction

Programmed death-1 ligand-1 (PD-L1, CD274, B7-H1) has been identified as the ligand for the immunoinhibitory receptor programmed death-1(PD1/PDCD1) and has been demonstrated to play a role in the regulation of immune responses and peripheral tolerance. PD-L1/B7-H1 is a member of the growing B7 family of immune molecules and this protein contains one V-like and one C-like Ig domain within the extracellular domain, and together with PD-L2, are two ligands for PD1 which belongs to the CD28/CTLA4 family expressed on activated lymphoid cells. By binding to PD1 on activated T-cells and B-cells, PD-L1 may inhibit ongoing T-cell responses by inducing apoptosis and arresting cell-cycle progression. Accordingly, it leads to growth of immunogenic tumor growth by increasing apoptosis of antigen specific T cells and may contribute to immune evasion by cancers. PD-L1 thus is regarded as promising therapeutic target for human autoimmune disease and malignant cancers.

Keywords

CD274; CD274 molecule; B7-H; B7H1; PDL1; PD-L1; PDCD1L1; PDCD1LG1; programmed cell death 1 ligand 1; B7 homolog 1; CD274 antigen; PDCD1 ligand 1; programmed death ligand 1; AMP-224