



PERFORMANCE DATA SHEET

3220

Human CD274(B7-H1)-muIg Fusion Protein*

For maximal recovery of contents
please quick spin vial before opening

CATALOG#: 541-820 (Preservative-free)

QUANTITY: 25 µg

CONCENTRATION: 0.5 mg/ml

Molecular Structure: A soluble fusion protein consisting of the murine CD8 alpha leader sequence, the mature extracellular (224aa) domain of human CD274 fused to murine IgG2a Fc + hinge (233aa).

muCD8 apha signal peptide residual amino acids+ linker: (1) kpqapelrgsas

CD274 mature EC: (224aa):

(13)ftvtvpkdlyvveygsnmtieckfpvekqldlaalivywemedkniifvhgeedlkvqhssyrqrarllkdqslgnaalqitdvklqdagvyrcmisyygadykritvkvnapynkinqrilvdpvtseheltcqaegykaeviwtsdhqvlsgktttntskreklfnvtstlrnttneifyctfrldpeenhtaelvipelplahppnerthtr

Linker +Murine IgG2a Hinge + Fc (235 aa):

(237)gteprgptikpcppckcpapnllggpsvfifppkikdvlmislspivtcvvvdvseddpdvqiswfvnnvevhvtaqtqthredynstlrsvsalpihqhdwmsgkefkckvnnkdlpapiertiskpkgsvrapqvvyvlpppeeemtkkqvtlctmvtdfmpediyvewtngktelnykntepvlvdsdgsyfmysklrvekknwvernsyscvvhvglhnhhtksfsrtpg(471)

Predicted monomeric (non glycosylated) molecular weight: 54.4 kd. The molecule is dimeric and runs at about 120 kd in SDS-PAGE under native conditions.

Transfectant Cell Line: CHO

INFORMATION: CD274 (B7-H1, PD-L1, Programmed Death Ligand) is a member of the B7 family and is expressed on a variety of tissues including lymphoid cells. It plays an important role in regulation of T cell activation, and is involved in progression of cancer, arthritis and HIV infection (3). CD274 binding to its receptor CD279 (PD-1) on activated T cells can decrease proliferation. Conversely, ligation of CD279 on primed T cells can stimulate IL-10 production. High levels of CD274 present in Renal cell carcinoma are associated with poor prognosis (1). Tumor expressed CD274 can increase apoptosis of tumor specific T cells resulting in better tumor cell survival (2). Gamma Interferon and PHA can up regulate CD274 expression on T cells.

REFERENCES: 1)Cancer Research (April 2006) **66**:3381. 2)J Molecular Medicine (Feb 2004) **81**(5):281. 3)Int J Hematol (Nov 2003) 78(4):321.

STORAGE CONDITIONS: Store at 2 - 5°C. Open under aseptic conditions. Freeze/Thawing is not recommended.

PRODUCT STABILITY: Product should retain activity for at least 6 months after shipping date when stored as recommended. Ship Date:_____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl. Product was 0.1 µm filtered and vialled under aseptic conditions.

PERFORMANCE: Purity was >90% by SDS-PAGE. N-terminal sequence was as predicted: KPQAP. Recombinant protein was detectable in EIA by Biotinylated antibody ANC6H1 (cat #274-030) as well as clone M1H1.

**This Product is intended for Laboratory Research use only.*