

Human CD279(PD-1)-muIg Fusion Protein*

CATALOG#: 549-820

QUANTITY: 25 µg

CONCENTRATION: 0.5 mg/ml

Molecular Structure: A soluble fusion protein consisting of the extracellular (139aa) domain of human CD279(PD-1) and murine IgG2a Fc +hinge. In SDS-PAGE, this protein runs at 52 kd under native, and 27 kd under reducing conditions.

Data suggest that the murine Ig Fc portion of this construct may be prone to cleavage.

Transfectant Cell Line: CHO

INFORMATION Human CD279 (PD-1, Programmed death 1) is a 55 kd Ig superfamily member with similarity to CD28 and CD152(CTLA-4). It is expressed on activated T and B and myeloid cells, and engagement by its ligands PD-L1 (CD274, B7-H1) or PD-L2 (B7-DC) can inhibit proliferation and cytokine expression. In mice blockade of PD-1 ligand interaction has been used to augment T cell anti cancer responses (1,2,3).

Recombinant CD279-muIg binds to recombinant CD274 and CD273 in EIA and cell surface CD273 on moDC in FACS. It is recognized by anti-CD279 mAb (cat #279-030; clone ANC4H6) in EIA.

References: 1) MA Curran, Allison JP, et al. (2010) *PNAS* 107(9): 4275-80. 2) Mangsbo SM, TH Totterman, et al. (2010) *J Immunotherapy* 33(3):225. 3) Hirano F, L Chen, et al. (2005) *Canc Res* 65: 1089.

STORAGE CONDITIONS: Store at 2 - 5°C. 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 viald under aseptic conditions.

PRODUCTION: CD279-muIg was purified from (low FBS containing) tissue culture supernatant of CHO transfectants using Protein A and size exclusion chromatography. Purity was >95% by SDS-PAGE .

PERFORMANCE: Five x 10⁵ cultured human monocyte-derived Dendritic cells (moDC) were washed and incubated 45 minutes on ice with 80 ul of CD279-muIg/Biotin (cat #549-030) at 10 µg/ml. Cells were washed twice and incubated with 2° reagent Streptavidin/PE (Catalog #232-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 0.57 log₁₀ fluorescent units. **This binding was blocked when cells were pre incubated with 100 ug/ml of purified CD279-muIg (Catalog # 549-020).**

*Research use only. Not for use in Diagnostic procedures.

Purified CD279-muIg blocks binding of CD279-muIg/Biotin +SA/PE to human moDC

