

**PERFORMANCE DATA SHEET**

2209

**Human CD86(p2)-muIg Fusion Protein\***

For maximal recovery of contents  
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**CATALOG#: 579-820 (Preservative-free)**

**QUANTITY: 25 µg**

**CONCENTRATION: 0.5 mg/ml**

**Molecular Structure:**

**Molecular Structure:** A soluble fusion protein consisting of the extracellular (224 aa) domain of human CD86 fused to murine IgG2a Fc region. This molecule contains 1 amino acid polymorphism when compared to Genebank sequence HUMB72A: v(162)i, This residue has not been implicated in the CD86-CD152 binding site(5).

CD86 EC (224 aa):

(1)aplkiaqyfnetaadlpcqfansqnqslselvfvwdqenlvnevygkkekfdsvhskymgrtsfdswtlrhlhnlqikdkglyqcii(90)rhkkptg(97)virihqmnselsvlanfsqpeivpisnitenvy  
nlctssihgyepkmsvllrktkstieydg(162)mqksqdnvtelydvsislsvsfpdvtsnmtificiletdktrllsspsfsieleppppdhip

+linker (2 aa): gt

Murine IgG2a Fc +Hinge (233 aa):

eprgptikpcppckcpapnllggpsvfifppkikdvlmislspivtcvvdvseddpdvqiswfvnnvevhtaqtqtthredynstlrvvsalpihqdwmsgkefkckvnnkdlpapiertiskpksvrapqvy  
vlpppeemtkkqvltlcmvtdfmpediyvewtngngkeltelnykntepvldsdgsyfmysklrvekknwvcrnsyscvvhgelnhhhttkfsrtpg

Predicted monomeric molecular weight: 52.2 kd. The molecule is dimeric and runs at about 115 kd in SDS-PAGE under native conditions.

**Transfectant Cell Line:** CHO

**INFORMATION:** Human CD86 (B7-2) is a costimulating ligand for CD28 and CTLA-4. CD86 is expressed on activated B cells and blood monocytes(3).

**References:** 1. C. Caux, et al, (1994) J Exp Med **180**: 1841-1847. 2. C.B. Thompson, (1995) Cell **81**: 979-982. 3. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 703-705.

4. D. Mauri, et al, (1995) J Immunol **155**: 118-127.

**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 12 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:** Recombinant protein from (low FBS containing) tissue culture supernatant of transfectants was purified using affinity and size exclusion chromatography.

**PERFORMANCE:** CD86(P2)-muIg was reactive in an Enzyme Immuno Assay utilizing a Goat anti-Mouse Ig coated plate for capture and either CD152-muIg/Biotin recombinant protein (Catalog #501-030) or anti-CD86/Biotin (Catalog # 307-030) followed by Streptavidin/HRP and TMB/H<sub>2</sub>O<sub>2</sub> substrate chromagen for detection.

CD86(p2)-muIg bound in FACS to cell surface CD28 present on cultured human T cell leukemic line HPB-MLT. Five x 10<sup>5</sup> cells per tube were washed and incubated 45 minutes on ice with 80 µl of CD86(P2)-muIg at 10 µg/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 0.52 log<sub>10</sub> fluorescent units when compared to a recombinant muIg Fc negative control (Catalog #581-010) at a similar concentration.

\*For Research use only. Not for use in Diagnostic Procedures.

**Binding of CD86(P2)-muIg +GAM/FITC to human HPB-MLT cells**

