## PERFORMANCE DATA SHEET

2209

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



For maximal recovery of contents please quick spin vial before opening

**CATALOG#:** 579-020 **QUANTITY:** 25 μg

CONCENTRATION: 0.5 mg/ml

**Molecular Structure:** A soluble fusion protein consisting of the extracellular (224 aa) domain of human CD86 fused to murine IgG2a Fc region. This molecules 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).

(1) a plkiqay fnetadl<math>pcqfansqnqslselvvfwqdqenlvlnevylgkekfdsvhskymgrtsfdsdswtlrlhnlqikdkglyqcii(90) rhkkptg(97) virihqmnselsvlanfsqpeivpisnitenvyinltcssihgypepkkmsvllrtknstieydgv(162) mqksqdnvtelydvsislsvsfpdvtsnmtifciletdktrllsspfsieledpqpppdhip

+linker (2 aa): gt

Murine IgG2a Fc +Hinge (233 aa):

eprgptik pcppckcpapnllggpsv fifppkik dvlmisl spivt cvvv dvsed dpd v qiswfvnn vevhtaqt qthredynstlrvv salpiqhqdwmsg kefkckvnnkdlpapiertisk pkgsvrapqvyvlpppeeemtkk qvtltcmvtd fmpediyvewt nngktelnykn tepvldsdgsyfmysklrvekkn wvern syscsvvheglhnh htt ksfsrtpg

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<sup>o</sup>C*. 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, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

**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/ $H_2O_2$  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  $10^5$  cells per tube were washed and incubated 45 minutes on ice with 80  $\mu$ l of CD86(P2)-muIg at 10  $\mu$ g/ml. Cells were washed twice and incubated with  $2^0$  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  $0.52 \log_{10}$  fluorescent units when compared to a recombinant muIg Fc negative control (Catalog #581-010) at a similar concentration.

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

