



# PERFORMANCE DATA SHEET

2209

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

For maximal recovery of contents  
please quick spin vial before opening

**CATALOG#: 589-020**

**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 4 amino acid polymorphisms when compared to Genebank sequence HUMB72A: v(162)i, h(217)q, m(97)v, and h(90)r. Two of these, m(97)v, and h(90)r are present in the putative CD86-CD152 binding site(5).

CD86 EC (224 aa):

(1)aplkqayfnetadlpcqfansqnqslselvfvwdqenlvnevygkfkfdsvhskymgrtsfdsdswtrlrhnlqikdkglyqci(90)rhkkptg(97)virihqmnsvlanfsqpeivpisnitenvylnltcssihgypepkkmvllrtkntstieydgimqksqdnvtelydvsislsvsfpdvtntmifciletdktrllsspsfisleddpqpdpdhip

+linker (2 aa): gt

Murine IgG2a Fc +Hinge (233 aa):

eprgptikpcepckcpapnllggpsvfifppkikdvlmislspivtcvvdvseddpdvqiswfvnnnevhtaqtqthredynstlrvsalpihqhdwmsgkfkckvnnkdlpapiertiskpksvrapqvyvlppeeemtkkqvtlcmvtdfmpediyvewtngktelnykntepvldsdgsyfmysklrveknwvvernsyscvvhvglhnhhttkfsrtpg

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). This recombinant variant has reduced affinity for CD152 and CD28 as observed by EIA and FACS.

**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.

5. PNAS (2003) 100(5):2586-2591.

**STORAGE CONDITIONS:** Store at 2 - 5°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(variant)-muIg was reactive in an Enzyme Immuno Assay utilizing a Goat anti-Mouse Ig coated plate for capture and anti-CD86/Biotin (Catalog # 307-030) followed by Streptavidin/HRP and TMB/H<sub>2</sub>O<sub>2</sub> substrate chromagen for detection. This product exhibited a reduced affinity for CD152 in FACS and EIA as compared to CD86-muIg (catalog #509-820) and CD86(p2)-muIg (catalog #579-820).

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