

Supplementary information, Figure S2 Ipilimumab exhibits poor blocking activity for B7-CTLA-4 interactions if B7 is immobilized. **(A)** Both Ipilimumab and L3D10 potently block B7-CTLA-4 interaction if soluble B7-1 is used for the binding assay. Varying doses of anti-human CTLA-4 mAbs were added along with 0.025 μg/ml of biotinylated human B7-1-Fc to plate coated with 1μg/ml human CTLA-4-Fc. The amounts of B7-1-Fc bound to plates were measured using HRP-conjugated avidin. Data shown are means of duplicates and are representative of two independent experiments. **(B)** Ipilimumab

binds better than L3D10 to biotinylated human CTLA-4-Fc. Varying doses of anti-human CTLA-4 mAbs or control IgG were coated onto the plate. Biotinylated CTLA4-Fc was added at 0.25 µg/ml. The amounts of CTLA-4 bound to plates were measured using HRP-conjugated streptavidin. Data shown are means of duplicates and are representative of two independent experiments. (C) Detectable but modest blocking of mouse B7-1-human CTLA-4 interaction by Ipilimumab when mB7-1 is expressed on CHO cells. Varying doses of anti-human CTLA-4 mAbs were added along with 200ng of human CTLA-4-Fc to 1.2 X 10⁵ CHO cells expressing mouse B7-1. Data shown are means and S.D. of triplicate data and are representative of three independent experiments. (D) L3D10 but not Ipilimumab blocks interaction between polyhistindine tagged human CTLA-4 and CHO cells expressing human B7-1. 1.2 X10⁵ CHO cells expressing human B7-1 were incubated with 200ng biotinylated and polyhistidinetagged CTLA-4 along with given doses of antibodies. The amounts of CTLA-4-Fc bound to CHO cells were detected with PE-streptavidin by flow cytometry. Data (Mean ± S.D.) shown are normalized mean fluorescence intensity (MFI) of triplicate samples and are representative of two independent experiments. (E) Ipilimumab and L3D10 exhibited differential blocking activity for the interaction between soluble hCTLA-4 and cell surface expressed hB7-1. hB7-1-positive, FcR-negative L929 cells (1X10⁵/test) were incubated with biotinylated CTLA-4-Fc (200ng/test) along with given doses of antibodies. The amounts of B7-bound CTLA-4-Fc were detected with PE-streptavidin, and mean fluorescence intensity (MFI) of PE was calculated. Data represent the results of two independent experiments.

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