

## SUPPLEMENTARY INFORMATION

### **Astragalus polysaccharides (PG2) enhances the M1 polarization of macrophages, functional maturation of dendritic cells, and T cell-mediated anticancer immune responses in patients with lung cancer**

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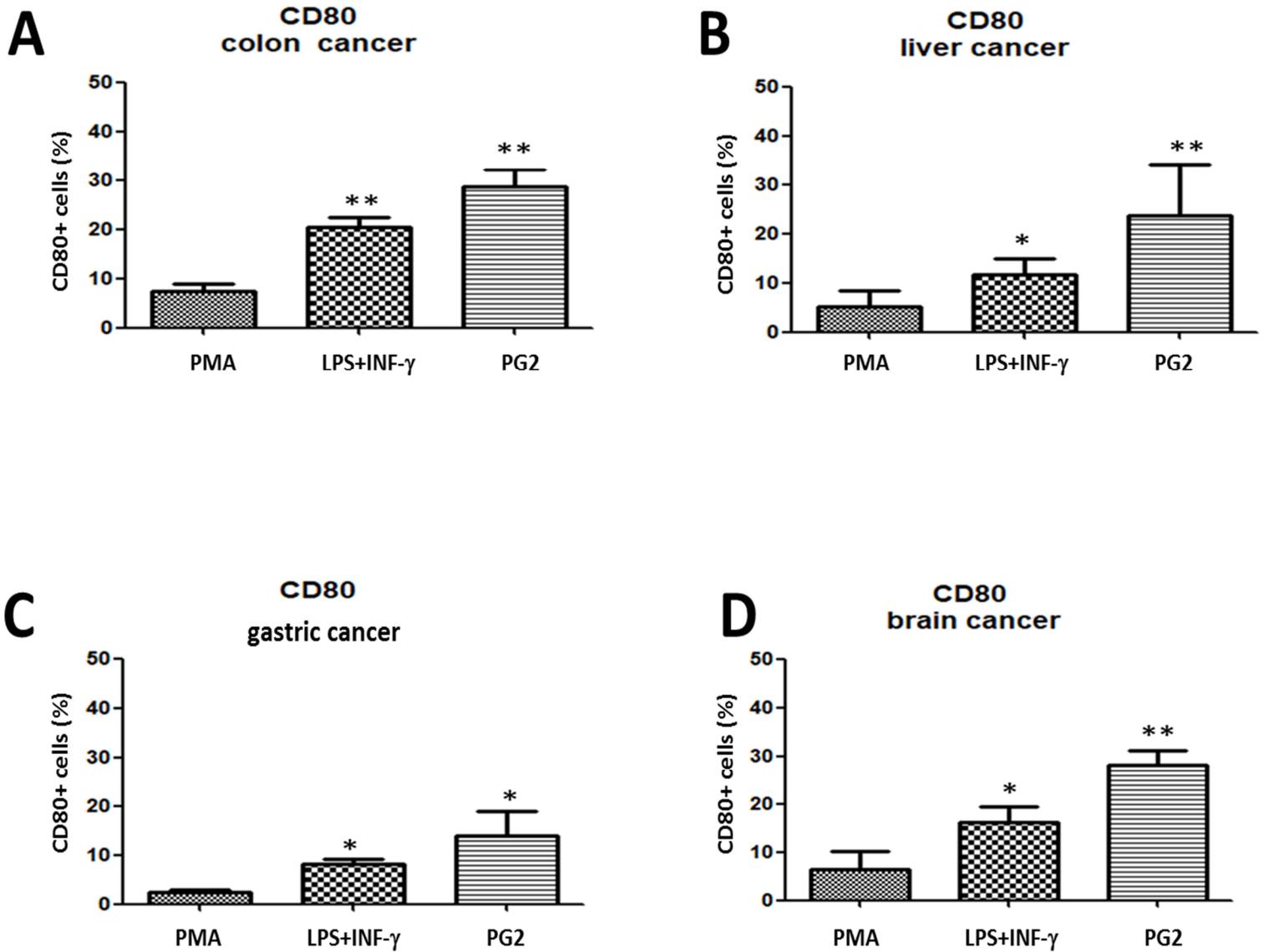
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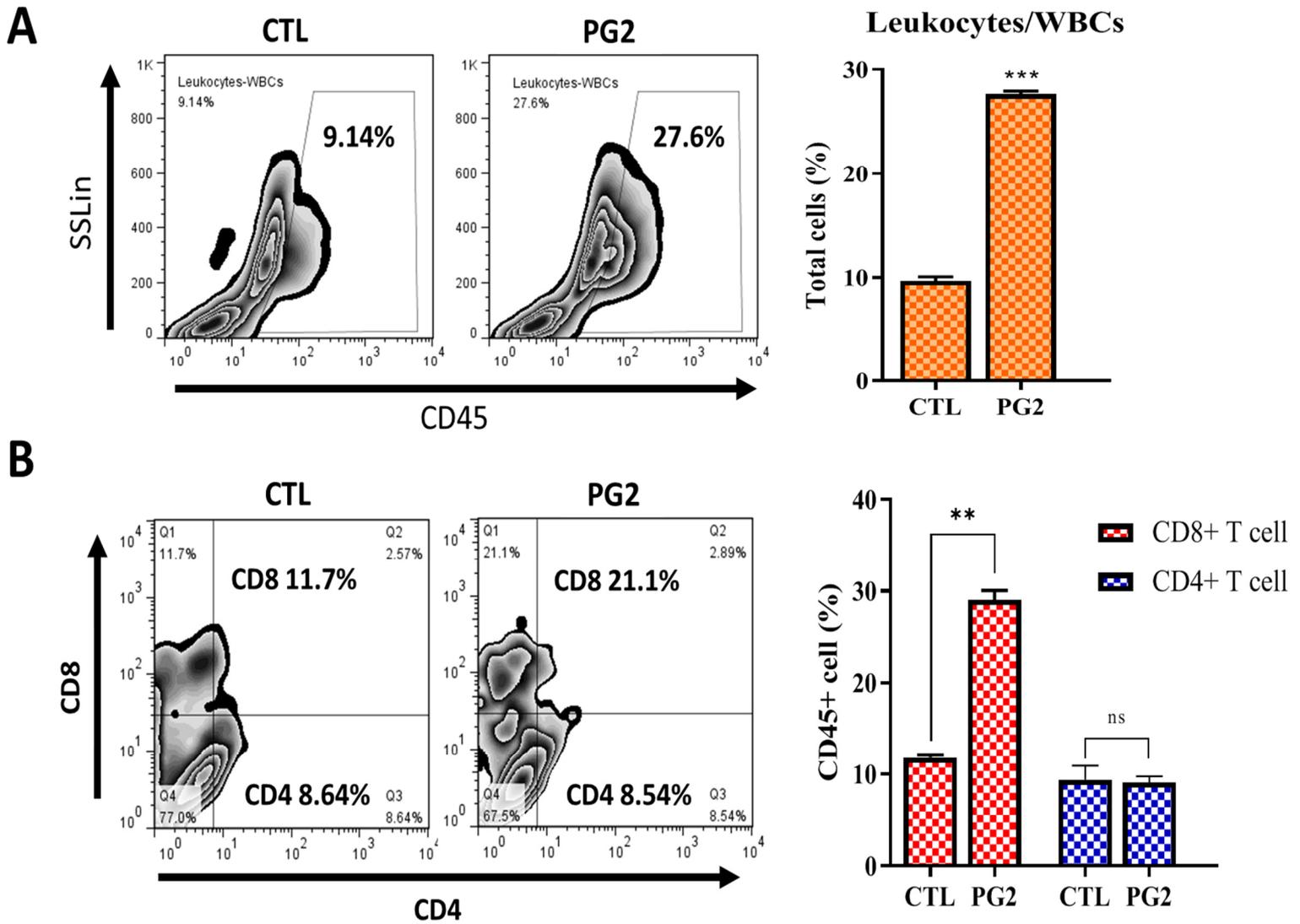
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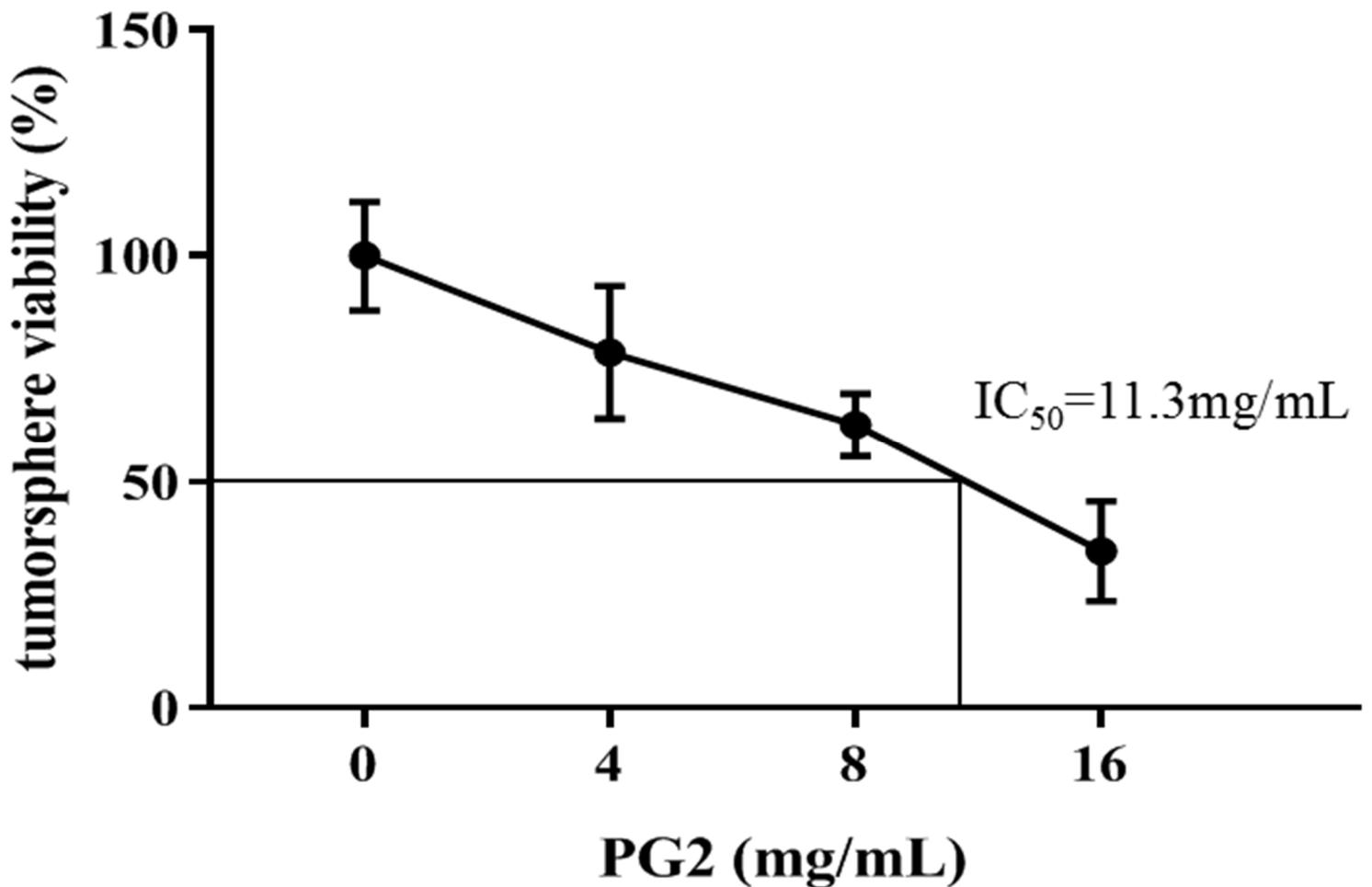
**Working title:** PG2 mediates broad spectrum anticancer immunogenicity



**Supplementary Figure S1.** PG2 enhances the production of CD80+ M1 macrophage-derived DCs from PBMCs of different type of cancer patients.



**Supplementary Figure S2.** PG2 treatment elicits significant increase in tumor infiltrating CD8+ T cells population. Representative flow cytometry data (left panel) and histograms (right panel) showing the effect of PG2 on the mean (A) CD45+ leukocyte, and (B) CD8+ or CD4+ T cell population in dissociated patient-derived cell suspensions compared to untreated control tumor samples. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , ns, not significant.



**Supplementary Figure S3.** PG2 suppressed the viability of tumorspheres derived from M2/H1229 co-culture system. Compared to the untreated control, PG2 concentration at the number of tumorspheres formed were reduced by 50% is indicated and used for dichotomization of PG2 dosage as high (16 mg/mL) or low (8 mg/mL).