

hPD-L1

Nomenclature C57BL/6Smoc-*Cd274*^{em1(hPD-L1)Smoc}

Cat. NO. NM-HU-00062

Strain State Repository Live

Gene Summary

Gene Symbol Cd274	Synonyms	B7h1; Pdl1; Pdcd1l1; Pdcd1lg1; A530045L16Rik
	NCBI ID	60533
	MGI ID	<u>1926446</u>
	Ensembl ID	ENSMUSG00000016496
	Human Ortholog	CD274

Model Description

The endogenous mouse Cd274(also known as PD-L1) gene was replaced by human PD-L1 gene. While hPD-L1(2)(Stock No.NM-HU-190039) mice function similarly to hPD-L1 mice, for more detailed information please contact our technical advisor.

Research Application: Immunotherapy,cancer research,drug screening *Literature published using this strain should indicate: hPD-L1 mice (Cat. NO. NM-HU-00062) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data



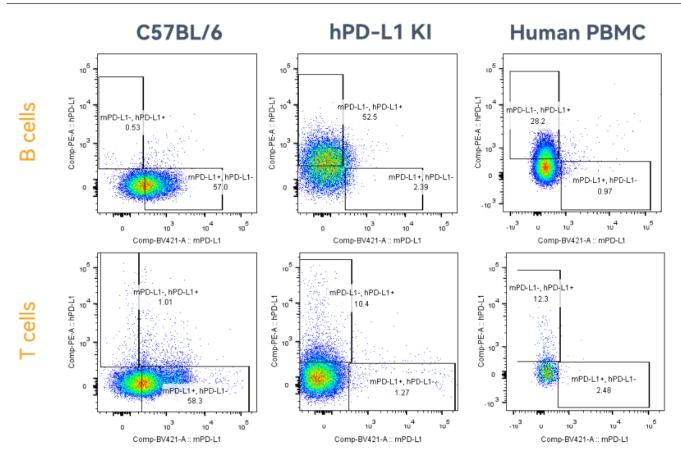


Fig1. Expression of PD-L1 in the spleen lymphocytes collected from homozygous humanized PD-L1 mice and wild-type mice is detected by FACS. The results showed that the expression of human PD-L1 can be detected in both T cells and B cells collected from the spleen of homozygous humanized PD-L1 mice. (Completed in collaboration with CrownBio)

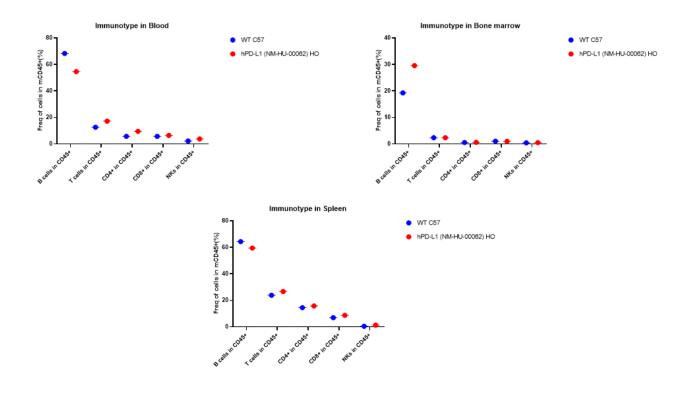




Fig2. Immunotype in blood, spleen and bone marrow in hPD-L1 mice.

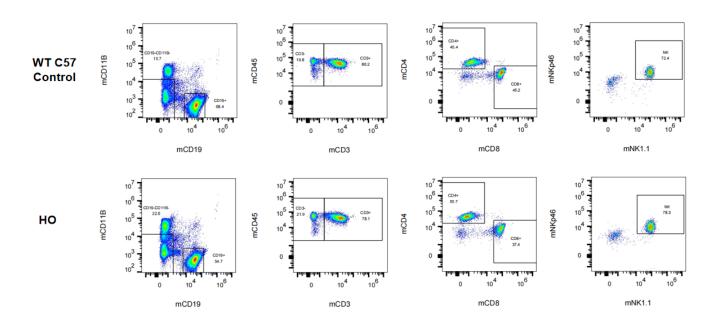


Fig3. Immunotype in blood in hPD-L1 mice.

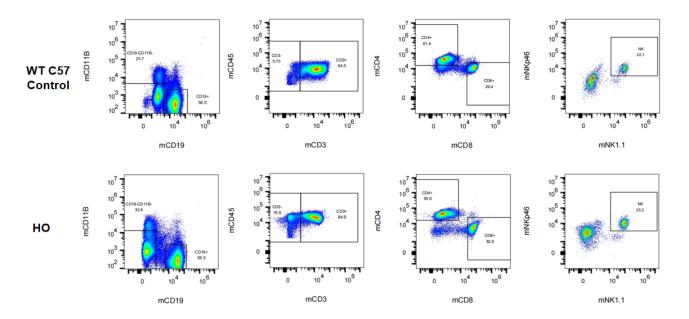


Fig4. Immunotype in spleen in hPD-L1 mice.



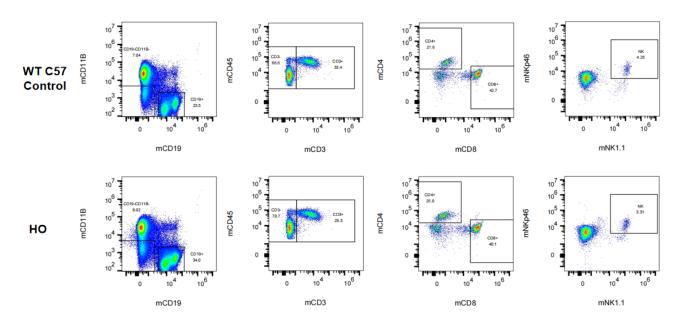


Fig5. Immunotype in bone marrow in hPD-L1 mice.

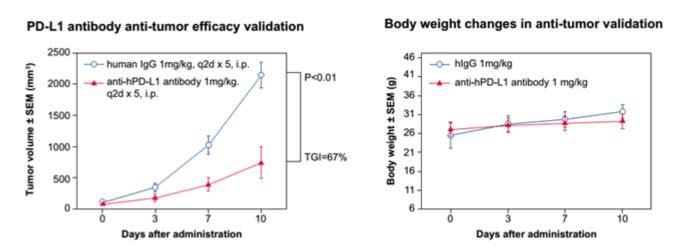


Fig6. *In vivo* validation of anti-tumor efficacy in a MC38 tumor-bearing model of humanized PD-L1 mice. Homozygous humanized PD-L1 mice were inoculated with MC38 colon cancer cells (expressing human PDL1 rather than murine PD-L1). After the tumors grew to 100 mm3, the animals were randomly assigned into a control group and a treatment group (n=5). The results showed: The antibodies targeting human PD-L1 were associated with a very significant antitumor effect (TGI: tumor growth inhibition, p < 0.001), demonstrating that the humanized PD-L1 mice are a good in vivo model for validating the efficacy of antibodies targeting human PD-L1.

Publications

<u>Distinct contribution of PD-L1 suppression by spatial expression of PD-L1 on tumor and non-tumor cells</u>

References: Cellular & Molecular Immunology