

# hPD-L1

<b>Nomenclature</b>	C57BL/6Smoc- <i>Cd274</i> <sup>em1(hPD-L1)Smoc</sup>
<b>Cat. NO.</b>	NM-HU-00062
<b>Strain State</b>	Repository Live

## Gene Summary

<b>Gene Symbol</b> <b>Cd274</b>	<b>Synonyms</b>	B7h1; Pdl1; Pdcd1l1; Pdcd1lg1; A530045L16Rik
	<b>NCBI ID</b>	<a href="#">60533</a>
	<b>MGI ID</b>	<a href="#">1926446</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000016496</a>
	<b>Human Ortholog</b>	CD274

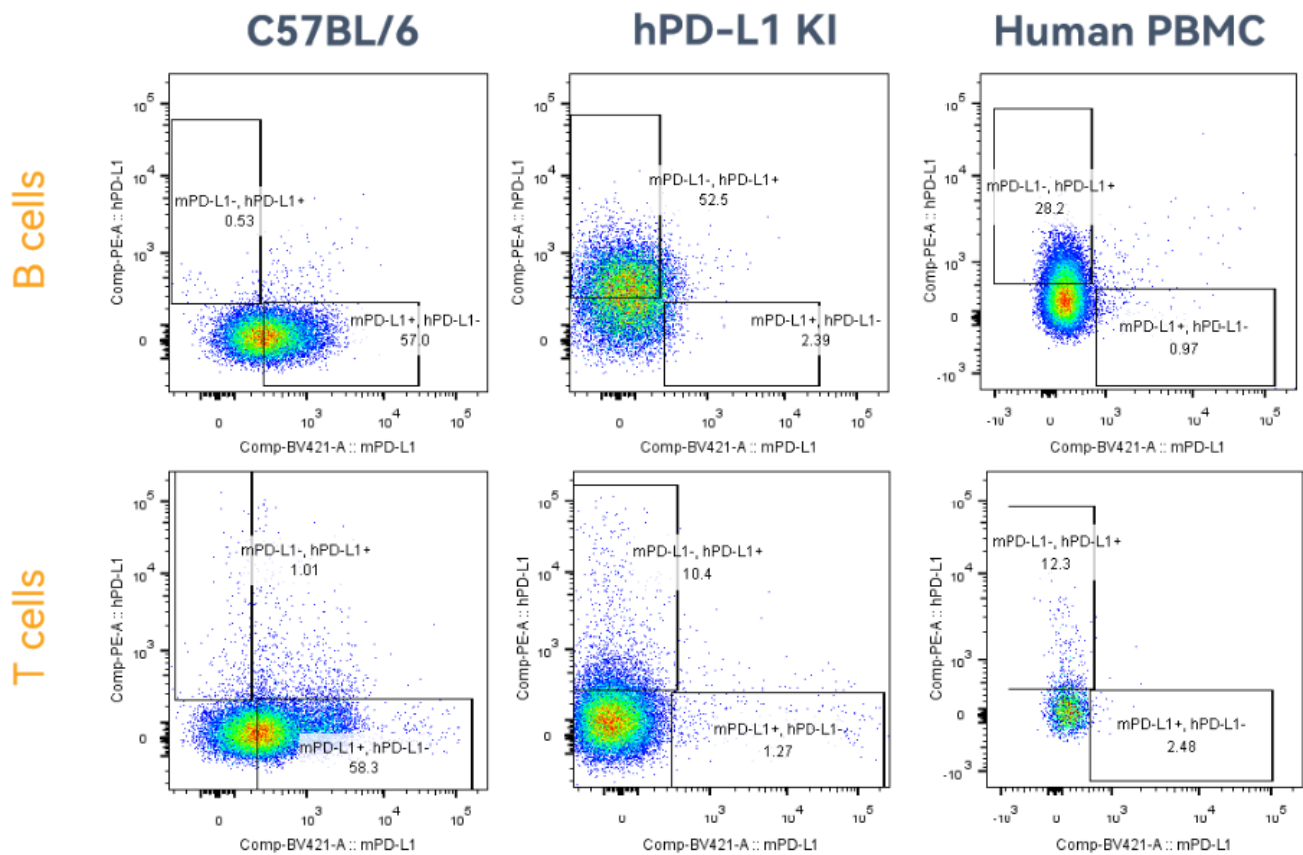
## Model Description

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.

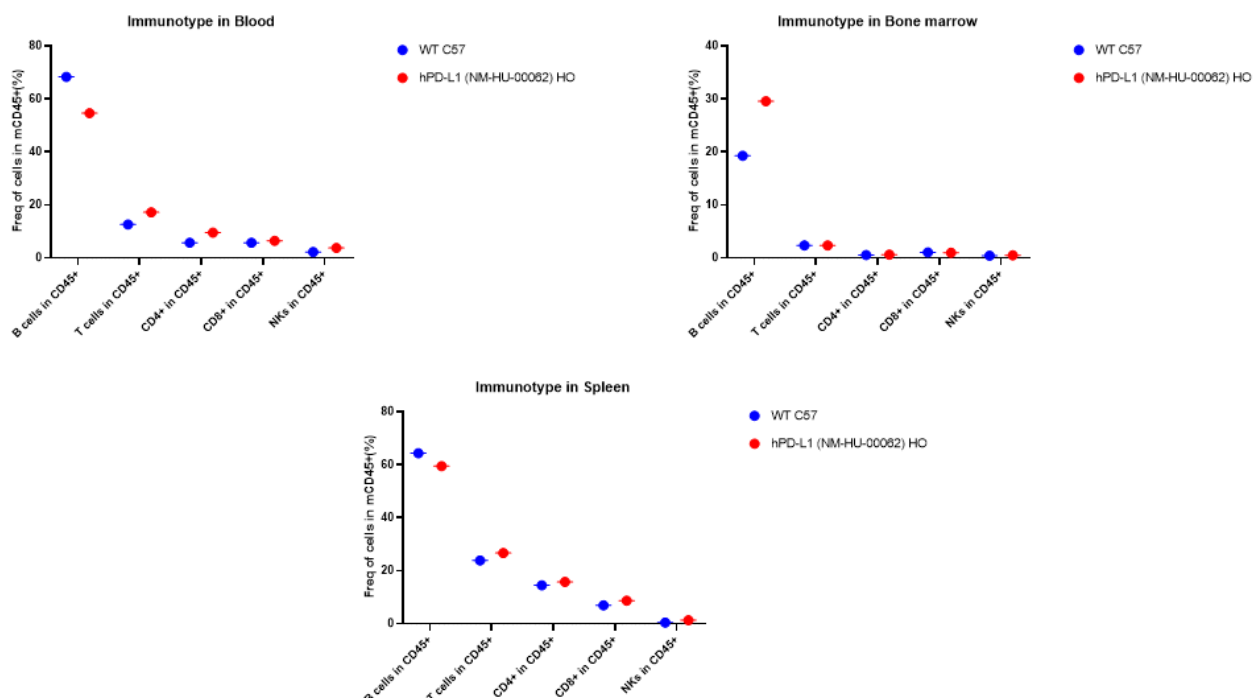
**Research Application:** Immunotherapy,cancer research,drug screening

\*Literature published using this strain should indicate: hPD-L1 mice (Cat. NO. NM-HU-00062) were purchased from Shanghai Model Organisms Center, Inc..

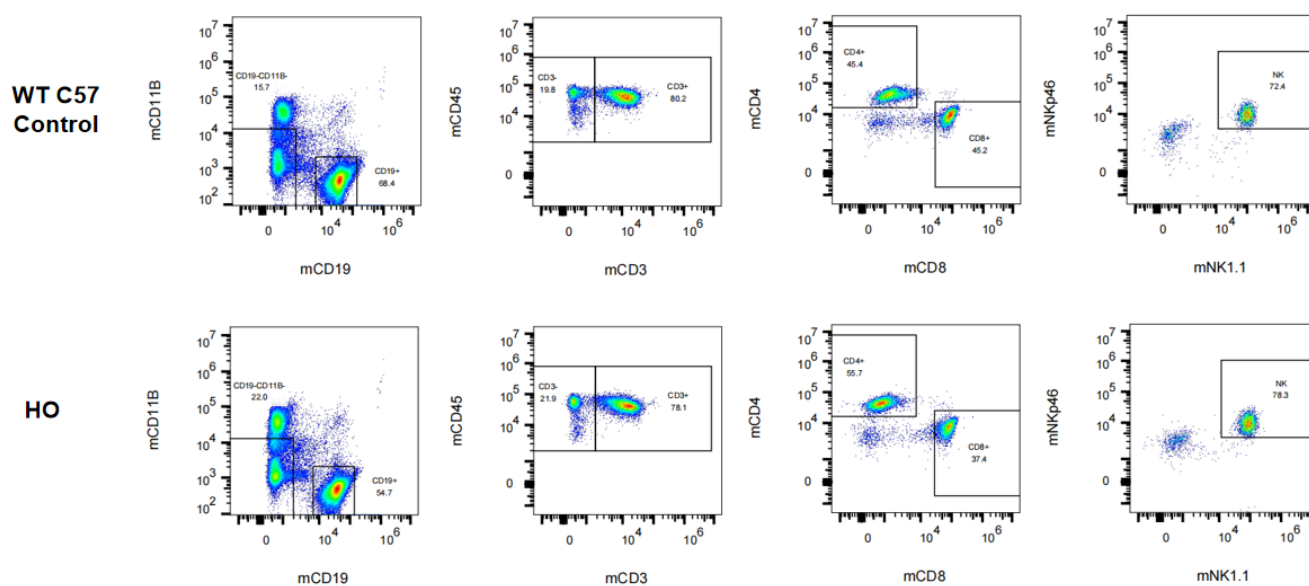
## Validation Data



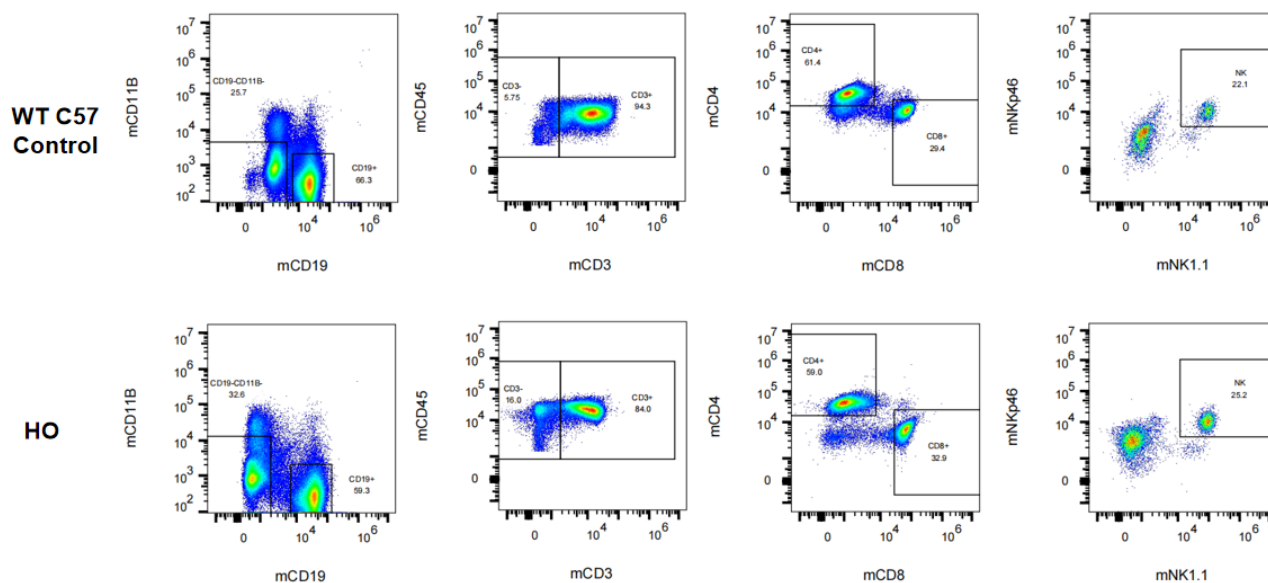
**Fig1. Expression of PD-L1 in the spleen lymphocytes collected from homozygous humanized PD-L1 mice and wild-type mice is detected by FACS.** The results showed that the expression of human PD-L1 can be detected in both T cells and B cells collected from the spleen of homozygous humanized PD-L1 mice.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



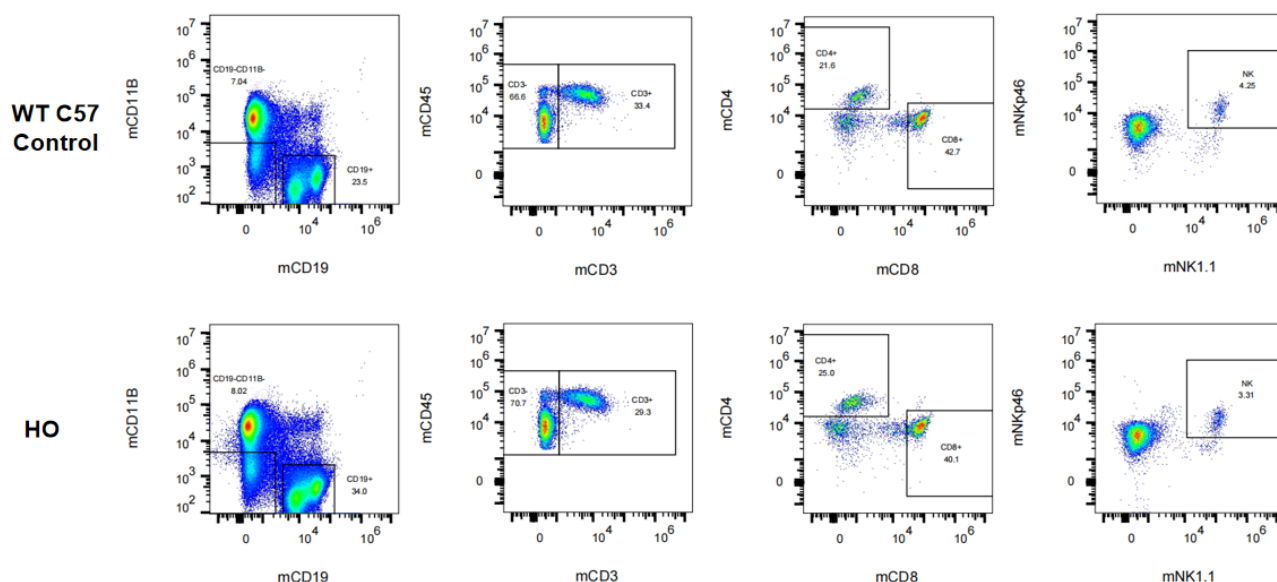
**Fig2. Immunotype in blood , spleen and bone marrow in hPD-L1 mice.**



**Fig3. Immunotype in blood in hPD-L1 mice.**

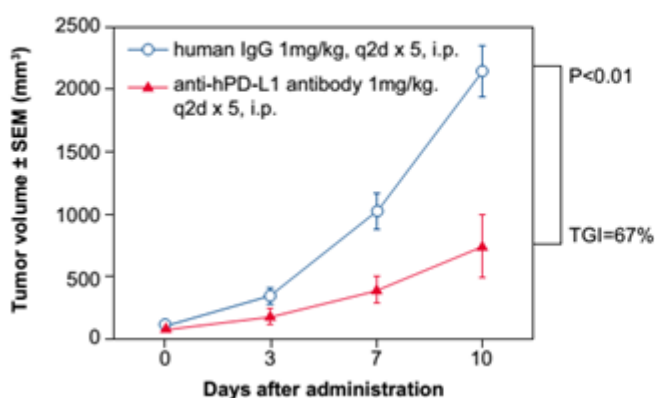


**Fig4. Immunotype in spleen in hPD-L1 mice.**

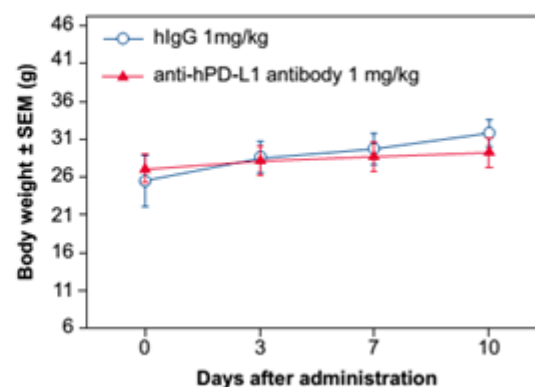


**Fig5. Immunotype in bone marrow in hPD-L1 mice.**

#### PD-L1 antibody anti-tumor efficacy validation



#### Body weight changes in anti-tumor validation



**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 mm<sup>3</sup>, 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 anti-tumor 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

[Distinct contribution of PD-L1 suppression by spatial expression of PD-L1 on tumor and non-tumor cells](#)

References: Cellular & Molecular Immunology