Validation data for Raji-hPD-L1 Cells

https://www.invivogen.com/raji-hpdl1

For research use only

Version 20C16-ED

Raji-hPD-L1 cells were developed from the Raji cell line to overexpress the human programmed cell death ligand 1 (PD-L1, also known as CD274 or B7-H1) gene. Raji-hPD-L1 cells were designed as target cells in InvivoGen's antibody-dependent cellular cytotoxicity (ADCC) assay using clinically-relevant anti-human PD-L1 monoclonal antibodies (mAbs). Human PD-L1 expression by Raji-hPD-L1 cells has been verified by flow-cytometry **(Figure 1)**, and induction of ADCC has been validated using InvivoGen's combinations of anti-human PD-L1 antibody isotypes and Jurkat-NFAT Lucia™ CD16 reporter cell line **(Figure 2)**. The level of ADCC induction is measured as a bioluminescent signal produced by an NFAT-dependent Lucia luciferase reporter protein. Antibodies displaying lower EC_{50} have higher ADCC potency.

Validation of PD-L1 expression

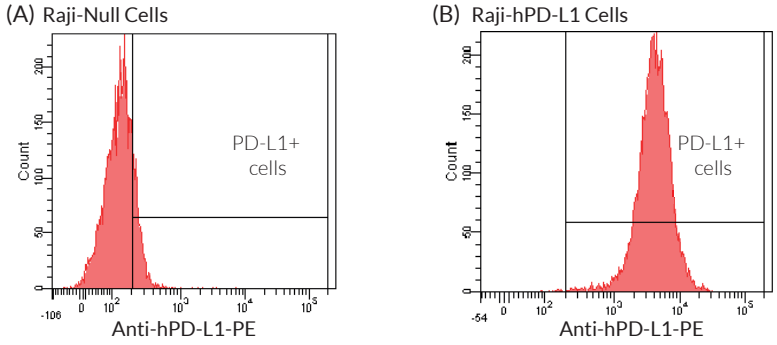

Figure 1: Validation of the expression of human PD-L1 by Raji-hPD-L1 cells. Raji-Null (A) and Raji-hPD-L1 (B) cells were incubated with a PE-conjugated Anti-hPD-L1 mAb for 30 minutes. The binding affinity was then measured using flow cytometry.

ADCC assay using various anti-human PD-L1 (Atezolizumab) antibody isotypes and Raji-hPD-L1 target cells

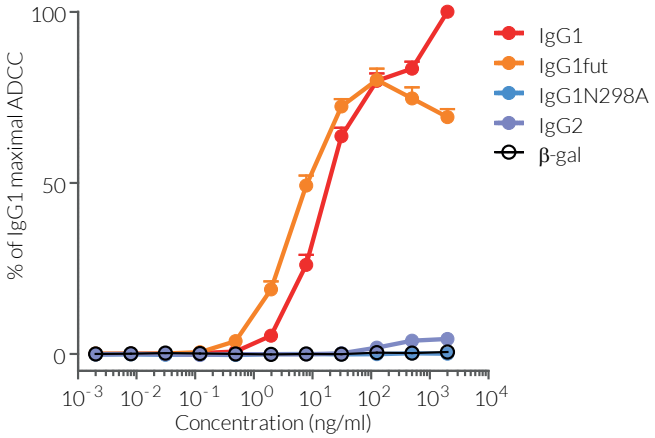

FIgure 2: Comparison of ADCC potency for native and engineered anti-human PD-L1 antibody isotypes. Raji-hPD-L1 cells were incubated with gradient concentrations of Anti-hPD-L1 or Anti-β-galactosidase (β-gal) mAbs for 1 hour. Jurkat-Lucia™ NFAT-CD16 effector cells were then co-incubated with targets cells for 6 hours. NFAT activation, reflecting the induced ADCC response, was assessed by determining Lucia luciferase activity in the supernatant using QUANTI-Luc™. Percentages of the maximal response normalized to the IgG1 isotype are shown.

TECHNICAL SUPPORT
InvivoGen USA (Toll-Free): 888-457-5873
InvivoGen USA (International): +1 (858) 457-5873
InvivoGen Europe: +33 (0) 5-62-71-69-39
InvivoGen Hong Kong: +852 3622-3480
E-mail: info@invivogen.com

InvivoGen
www.invivogen.com