

PD1/NFAT-Luc/Jurkat

CBP74018

Contents

I. Background.....	1
II. Description.....	1
III. Introduction.....	1
IV. Description of Host Cell Line.....	2
V. Representative Data.....	3



PD1/NFAT-Luc/Jurkat CBP74018

I. Background

This PD-1 Cell Line is used to measure the binding of PD-1 to PD-L1/PD-L2. Programmed Cell Death Protein 1 (PD-1), a receptor expressed on activated T cells, binds to its ligands, PD-L1 and PD-L2, to negatively regulate immune responses. The PD-1 ligands are found on most cancers, and PD-1:PD-L1/2 interaction inhibits T cell activity and allows cancer cells to escape immune surveillance. The PD-1:PD-L1/2 pathway is also involved in regulating autoimmune responses, making these proteins promising therapeutic targets for a number of cancers, as well as multiple sclerosis, arthritis, lupus, and type I diabetes.

II. Description

Recombinant Jurkat T cell expressing firefly luciferase gene under the control of NFAT response elements with constitutive expression of human PD-1 (Programmed Cell Death 1, PDCD1, SLEB2, CD279, GenBank Accession #NM_005018).

III. Introduction



Host Cell: Jurkat

Expressed gene: PD1、NFAT-Luciferase

Stability: 32 passages (in-house test, that not means the cell line will be instable beyond the passages we tested.)

Synonym(s): Programmed cell death 1, PDCD1, PD-1, PD1, SLEB2, CD279, HPD-L, PD1/NFAT, PD-1 NFAT, PD-1/NFAT

Freeze Medium: 90% FBS+10% DMSO

Culture Medium: RPMI-1640+10%FBS+800ug/ml hygromycin+1ug/ml puromycin

Mycoplasma Testing: Negative

Storage: Liquid nitrogen

Application(s): Functional(Report Gene) Assay

IV. Description of Host Cell Line

Organism: Homo sapiens, human

Tissue: Peripheral blood

Disease: Acute T cell leukemia

Morphology: Lymphoblast

Growth Properties: Suspension



V. Representative Data

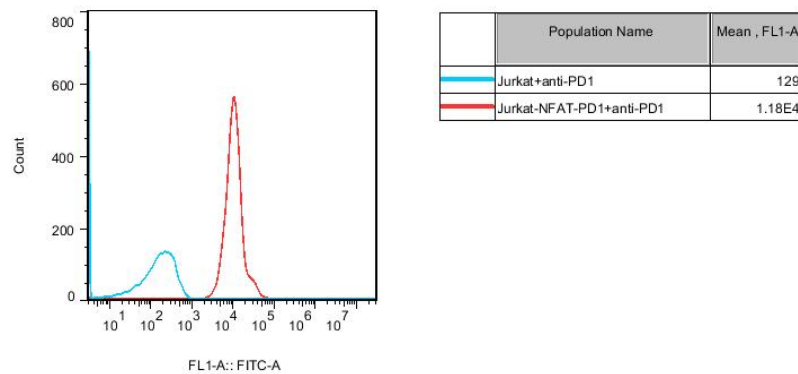


Figure 1. Recombinant Jurkat T cell expressing firefly luciferase gene under the control of NFAT response elements with constitutive expression of human PD-1 (Programmed Cell Death 1, PDCD1, SLEB2, CD279, GenBank Accession #NM_005018).

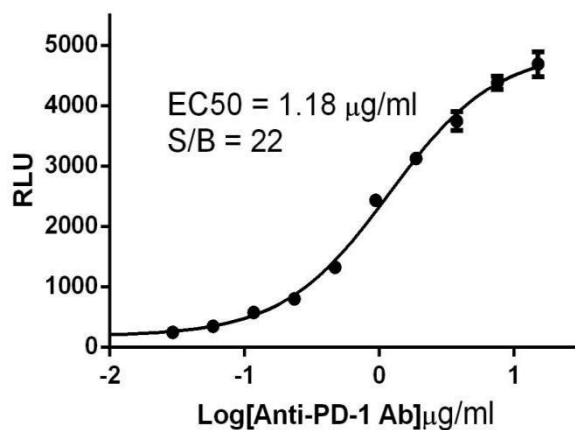


Figure 2. Detect Luciferase assay by Ultra Luciferase Detection Kit CBPH0001 (we strongly suggest to purchase from Cobioer).Dose response curve of anti-PD-1 antibody on PD-1/PD-L1 Blockade Bioassay Model.



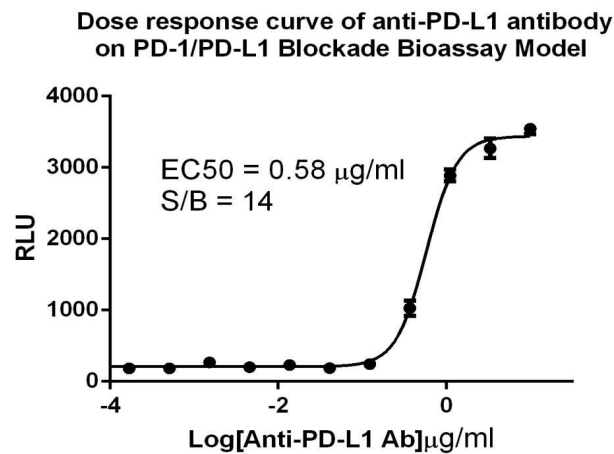


Figure 3. Detect Luciferase assay by Ultra Luciferase Detection Kit CBPH0001 (we strongly suggest to purchase from Cobioer). Dose response curve of anti-PD-L1 antibody on PD-1/PD-L1 Blockade Bioassay Model.

Dose Response of PD-1 Agonist Antibody in PD-1/NFAT-Luc/Jurkat Cells With FC γ R aAPC Cells

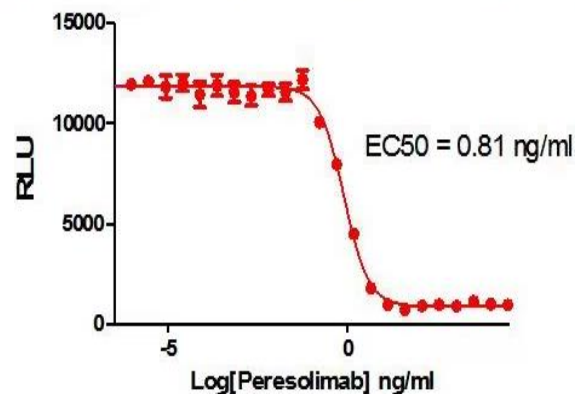


Figure 3. Dose Response of PD-1 Agonist Antibody in PD-1/NFAT-Luc/Jurkat Cells With FC γ R aAPC Cell.

