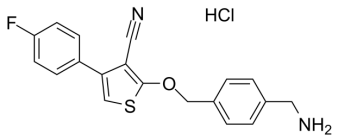
PD-L1-IN-3

Cat. No.:	HY-155101
CAS No.:	2953044-29-4
Molecular Formula:	$C_{19}H_{16}ClFN_2OS$
Molecular Weight:	374.86
Target:	PD-1/PD-L1
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

PD-L1-IN-3 (Compound 4a) is a compound that targets PD-1/PD-L1, the IC_{50} value and EC_{50} value is 4.97nM and 2.70 μM for inhibit PD-L1 and Jurkat T cells, respectively. PD-L1-IN-3 can bind PD-L1 dimer to prevent PD-1 binding to PD-L1, therefore blocking PD-1 signaling. PD-L1-IN-3 can be used for lung cancer and melanoma diseases research[1].

In Vitro

PD-L1-IN-3 (Compound 4a) (0.01-100 μM, 40 min) disrupts the binding between PD-1 and PD-L1 and enhances a TCR-mediated activation of the Jurkat cells[1].

PD-L1-IN-3 (0.01-100 μM, 40 min) has higher uptake which correlated with PD-L1 expression in PD-L1$^+$ H358 tumors[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Jurkat cells
Concentration:	0.01-100 μM
Incubation Time:	40 min
Result:	Observed EC_{50} value of 2.70 μM.

Immunofluorescence[1]

Cell Line:	PD-L1$^{+/-}$ (H358 and ES2) tumor
Concentration:	0.01-100 μM
Incubation Time:	40 min
Result:	Observed 40-55% higher uptake in PD-L1$^+$ H358 tumors than in wild-type counterparts. Failed to discriminate between wild-type and knock-out for ES2 slides.

REFERENCES

[1]. Ważyńska MA, et al. Design, Synthesis, and Biological Evaluation of 2-Hydroxy-4-phenylthiophene-3-carbonitrile as PD-L1 Antagonist and Its Comparison to Available Small Molecular PD-L1 Inhibitors. J Med Chem. 2023 Jul 27;66(14):9577-9591.

Caution: Product has not been fully validated for medical applications. For research use only.

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