Proteins

BMS-1166

Target:

Cat. No.: HY-102011 CAS No.: 1818314-88-3 Molecular Formula: $C_{36}H_{33}CIN_2O_7$

Molecular Weight: 641.11

Pathway: Immunology/Inflammation

-20°C Storage: Powder 3 years In solvent -80°C 6 months

PD-1/PD-L1

-20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 125 mg/mL (194.97 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.5598 mL	7.7990 mL	15.5979 mL
	5 mM	0.3120 mL	1.5598 mL	3.1196 mL
	10 mM	0.1560 mL	0.7799 mL	1.5598 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (3.24 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (3.24 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (3.24 mM); Clear solution

BIOLOGICAL ACTIVITY

Description BMS-1166 is a potent PD-1/PD-L1 immune checkpoint inhibitor. BMS-1166 induces dimerization of PD-L1 and blocks its $interaction \ with \ PD-1, with \ an \ IC_{50} \ of \ 1.4 \ nM. \ BMS-1166 \ antagonizes \ the \ inhibitory \ effect \ of \ PD-1/PD-L1 \ immune \ checkpoint$ on T cell activation^{[1][2]}.

IC50: 1.4 nM (PD-1/PD-L1 interaction)^[1]. IC₅₀ & Target

In Vitro $BMS-1166 is a potent PD-1/PD-L1 interaction inhibitor with an IC_{50} of 1.4 nM in a homogenous time-resolved fluorescence$ binding assay^[1]. BMS-1166 antagonizes the inhibitory effect of PD-1/PD-L1 immune checkpoint on T cell activation. BMS-

1166 dose dependently abolishes the inhibition of ECs stimulation by sPD-L1 $^{[2]}$.

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

REFERENCES

[1]. Guzik K, et al. Small-Molecule Inhibitors of the Programmed Cell Death-1/Programmed Death-Ligand 1 (PD-1/PD-L1) Interaction via Transiently Induced Protein States and Dimerization of PD-L1. J Med Chem. 2017 Jul 13;60(13):5857-5867.

[2]. Skalniak L, et al. Small-molecule inhibitors of PD-1/PD-L1 immune checkpoint alleviate the PD-L1-induced exhaustion of T-cells. Oncotarget. 2017 Aug 7;8(42):72167-72181.

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

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