

PRODUCT INFORMATION



PD-1-IN-1

Item No. 27775

CAS Registry No.: 1673534-76-3
Formal Name: N-[[[(1S)-3-amino-1-[3-[(1R)-1-amino-2-hydroxyethyl]-1,2,4-oxadiazol-5-yl]-3-oxopropyl]amino]carbonyl]-L-threonine

Synonyms: CA-170, PD-1 Inhibitor 1, Programmed Cell Death 1-IN-1, Programmed Cell Death 1 Inhibitor 1

MF: C₁₂H₂₀N₆O₇

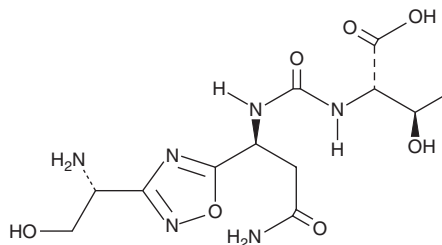
FW: 360.3

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PD-1-IN-1 is supplied as a solid. A stock solution may be made by dissolving the PD-1-IN-1 in the solvent of choice, which should be purged with an inert gas. PD-1-IN-1 is soluble in DMSO.

Description

PD-1-IN-1 is an inhibitor of programmed cell death 1 ligand 1 (PD-L1), PD-L2, and V-type immunoglobulin domain-containing suppressor of T-cell activation (VISTA).¹ It rescues PD-L1-, PD-L2-, or VISTA-induced inhibition of IFN- γ release in isolated human peripheral blood mononuclear cells (PBMCs) stimulated with anti-CD3 and anti-CD28 antibodies (EC₅₀s = 66.1, 80.9, and 82.9 nM, respectively). PD-1-IN-1 is selective for these immune checkpoint proteins over B7-1 and cytotoxic T lymphocyte protein 4 (CTLA-4) at 1,000 nM and a panel of 80 receptors, transporters, and enzymes at 10,000 nM. It does not induce IL-2, IFN- γ , or TNF- α release in isolated human PBMCs in an *in vitro* cytokine storm assay when used at concentrations ranging from 10-1,000 nM. PD-1-IN-1 (10 mg/kg, p.o.) increases proliferation and activation of tumor-infiltrating T cells and decreases tumor volume in a CT26 murine colon cancer model.

Reference

1. Sasikumar, P.G., Sudarshan, N.S., Adurthi, S., *et al.* PD-1 derived CA-170 is an oral immune checkpoint inhibitor that exhibits preclinical anti-tumor efficacy. *Commun. Biol.* **4**(1), 699 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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