PRODUCT INFORMATION



Diprovocim-1

Item No. 33174

CAS Registry No.: 2170867-89-5

Formal Name: (35,3'5,45,4'S)-1,1'-(1,4-

> phenylenedicarbonyl)bis[N-[(1S,2R)-2-phenylcyclopropyl]-3,4-pyrrolidinedicarboxamide

MF: $C_{56}H_{56}N_6O_6$ FW: 909.1 **Purity:** ≥98% 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

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

Description

Diprovocim-1 is an agonist of the toll-like receptor 1/2 heterodimer. 1 It induces TNF-α release in THP-1 cells (EC₅₀ = 110 pM), an effect that can be inhibited by anti-TLR1 or anti-TLR2 antibodies. Diprovocim-1 (10 mg/kg) increases the production of ovalbumin-specific IgG1 in wild-type, but not $TLR2^{-/-}$, mice sensitized to ovalbumin.² It also enhances anti-PD-L1 antibody-induced activation of cytotoxic T lymphocytes, reduction of tumor growth, and increases in survival in a B16/F10 murine melanoma model.

References

- 1. Morin, M.D., Wang, Y., Jones, B.T., et al. Diprovocims: A new and exceptionally potent class of toll-like receptor agonists. J. Am. Chem. Soc. 140(43), 14440-14454 (2018).
- Wang, Y., Su, L., Morin, M.D., et al. Adjuvant effect of the novel TLR1/TLR2 agonist Diprovocim synergizes with anti-PD-L1 to eliminate melanoma in mice. Proc. Natl. Acad. Sci. U.S.A. 115(37), E8698-E8706 (2018).

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

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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