# PRODUCT INFORMATION



# IDO-IN-2

Item No. 34876

CAS Registry No.: 1668565-74-9

Formal Name: N-[4-[bis(2-methylpropyl)amino]-2'-

(2H-tetrazol-5-yl)[1,1'-biphenyl]-3-yl]-

N'-(4-methylphenyl)-urea

Synonym: PCC0208009 MF:  $C_{29}H_{35}N_7O$ 497.6 FW: **Purity:** ≥98%  $\lambda_{max}$ : 257 nm UV/Vis.: Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

# **Laboratory Procedures**

IDO-IN-2 is supplied as a solid. A stock solution may be made by dissolving the IDO-IN-2 in the solvent of choice, which should be purged with an inert gas. IDO-IN-2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of IDO-IN-2 in ethanol is approximately 2 mg/ml and approximately 10 mg/ml in DMSO and DMF.

## Description

IDO-IN-2 is an inhibitor of indoleamine 2,3-dioxygenase 1 (IDO1;  $IC_{50}$  = 0.097  $\mu M$  in HeLa cells).<sup>1</sup> In vivo, IDO-IN-2 (100 mg/kg) decreases intratumor levels of Ki67, a marker of cell proliferation, and reduces tumor weight in a GL261 murine glioma heterotopic transplantation model.<sup>2</sup> It also decreases mechanical and thermal hypersensitivity, improves novel object recognition, and decreases anterior cingulate cortex (ACC) and amygdala levels of IDO1 in a rat model of neuropathic pain induced by spinal nerve ligation (SNL).<sup>3</sup>

## References

- 1. Williams, D.K., Markwalder, J.A., Balog, A.J., et al. Development of a series of novel o-phenylenediaminebased indoleamine 2,3-dioxygenase 1 (IDO1) inhibitors. Bioorg. Med. Chem. Lett. 28(4), 732-736 (2018).
- 2. Sun, S., Du, G., Xue, J., et al. PCC0208009 enhances the anti-tumor effects of temozolomide through direct inhibition and transcriptional regulation of indoleamine 2,3-dioxygenase in glioma models. Int. J. Immunopathol. Pharmacol. 32, 2058738418787991 (2018).
- 3. Wang, Y., Li, C.-M., Han, R., et al. PCC0208009, an indirect IDO1 inhibitor, alleviates neuropathic pain and co-morbidities by regulating synaptic plasticity of ACC and amygdala. Biochem. Pharmacol. 177, 113926 (2020).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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## **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM