

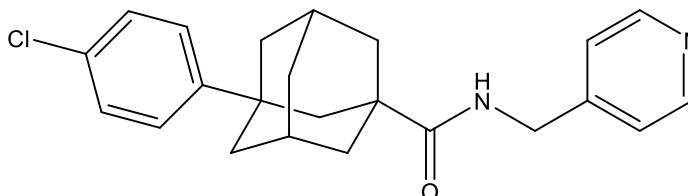
Catalog # 10-4822

ABC294640

CAS# 915385-81-8

3-(4-Chlorophenyl)-N-(pyridine-4-ylmethyl)adamantane-1-carboxamide; Opaganib

Lot # FBS5021



ABC294640 is a selective orally bioavailable inhibitor ($IC_{50} = 60 \mu M$) of sphingosine kinase 2 (SK2).¹ Displayed efficacy alone or in combination with other chemotherapeutics in multiple cancer models.² ABC294640 induced immunogenic cell death (ICD) by increasing the surface expression of the ICD marker calreticulin and synergized with anti-CTLA4 therapy in several cancer models.³ It reduced the suppressive activity of monocytic myeloid-derived suppressor cells in the tumor microenvironment and promoted their differentiation into a mature immunogenic phenotype.⁴ Additionally, it enhanced anti-PD-1 therapy by the same mechanism.⁴

- 1) French *et al.* (2010) *Pharmacology and antitumor activity of ABC294640, a selective inhibitor of sphingosine kinase-2*; J. Pharmacol. Exp. Ther. **333** 129
- 2) Companioni *et al.* (2021) *Targeting Sphingolipids for Cancer Therapy*; Front. Oncol. **11** 745092
- 3) Maines *et al.* (2023) *Opaganib (ABC294640) Induces Immunogenic Tumor Cell Death and Enhances Checkpoint Antibody Therapy*; Int. J. Mol. Sci. **24** 16901
- 4) Chakraborty *et al.* (2026) *Sphingosine kinase-2 inhibition promotes immunogenic differentiation of myeloid-derived suppressor cells through an Acetyl-CoA carboxylase-phosphatidylcholine axis*; Nat. Commun. Epub ahead of print

PHYSICAL DATA

Molecular Weight:	380.92
Molecular Formula:	C ₂₃ H ₂₅ ClN ₂ O
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>50 mg/ml)
Physical Description:	Off-white to pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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