

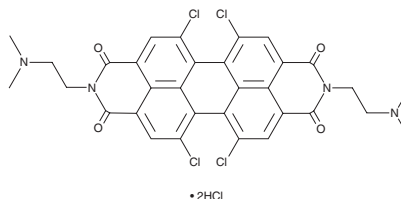
PRODUCT INFORMATION



PDIC-NC

Item No. 40818

CAS Registry No.: 2633013-75-7
Formal Name: 5,6,12,13-tetrachloro-2,9-bis[2-(dimethylamino)ethyl]-anthra[2,1,9-def:6,5,10-d'e'f'] diisoquinoline-1,3,8,10(2H,9H)-tetrone, dihydrochloride
MF: $C_{32}H_{24}Cl_4N_4O_4 \cdot 2HCl$
FW: 743.3
Purity: $\geq 95\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

PDIC-NC is supplied as a solid. A stock solution may be made by dissolving the PDIC-NC in the solvent of choice, which should be purged with an inert gas. PDIC-NC is slightly soluble (0.1-1 mg/ml) in acetonitrile and methanol.

Description

PDIC-NC is an activator of stimulator of interferon genes (STING) and an anticancer agent.^{1,2} It increases the levels of phosphorylated STING in Lewis lung carcinoma cells when used at a concentration of 2 μM .¹ PDIC-NC decreases the viability of A549 and NCI H446 lung cancer cells (IC_{50} s = 0.48 and 0.79 $\mu g/ml$, respectively).² It increases the levels of reactive oxygen species (ROS) and decreases the oxygen consumption rate (OCR) in A549 and NCI H446 cells when used at concentrations of 1 and 2 $\mu g/ml$, respectively. PDIC-NC selectively accumulates in the lungs over the heart, liver, spleen, and kidneys in mice. Intravenous administration of PDIC-NC (2 mg/kg) reduces tumor volume and the number of metastases in A549 mouse xenograft models.

References

1. Zhao, X., Zheng, R., Zhang, B., *et al.* Sulfonated perylene as three-in-one STING agonist for cancer chemo-immunotherapy. *Angew. Chem. Int. Ed. Engl.* **63(11)**, e202318799 (2024).
2. Liu, Z., Wang, X., Chen, Q., *et al.* Regulating twisted skeleton to construct organ-specific perylene for intensive cancer chemotherapy. *Angew Chem. Int. Ed. Engl.* **60(29)**, 16215-16223 (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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