PRODUCT INFORMATION



STING Agonist 23

Item No. 38345

Formal Name: N,N'-(pentane-1,5-diyl)bis(5-nitrofuran-2-

carboxamide)

Stimulator of Interferon Genes Agonist 23 Synonym:

MF: $C_{15}H_{16}N_4O_8$

FW: 380.3 **Purity:** ≥95%

λ_{max}: 215, 308 nm UV/Vis.:

Supplied as: A solid Storage: -20°C Stability: ≥2 years

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

Laboratory Procedures

STING agonist 23 is supplied as a solid. A stock solution may be made by dissolving the STING agonist 23 in the solvent of choice, which should be purged with an inert gas. STING agonist 23 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of STING agonist 23 in these solvents is approximately 14 and 16 mg/ml, respectively.

Description

STING agonist 23 is an agonist of stimulator of interferon genes (STING).¹ It increases the phosphorylation of TANK-binding kinase 1 (TBK1) in wild-type, but not STING-deficient, HT-1080 cells when used at a concentration of 20 µM. STING agonist 23 induces dimerization of STING in THP-1 cells and mouse bone marrow-derived macrophages (BMDMs) in a concentration-dependent manner. It inhibits the replication of herpes simplex virus (HSV), rhesus rotavirus (RRV), and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in vitro (EC₅₀s = 6.15, 6.8, and 10.71 μ M, respectively). In vivo, STING agonist 23 increases serum levels of IFN- β and TNF- α in mice.

Reference

1. Zang, R., Xue, L., Zhang, M., et al. Design and syntheses of a bimolecular STING agonist based on the covalent STING antagonist. Eur. J. Med. Chem. 250, 115184 (2023).

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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