

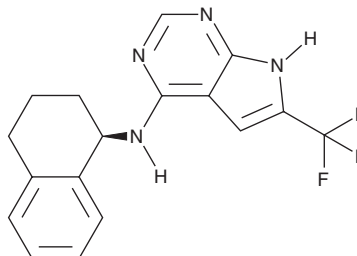
PRODUCT INFORMATION



MTK 458

Item No. 41391

CAS Registry No.: 2499962-58-0
Formal Name: N-[(1R)-1,2,3,4-tetrahydro-1-naphthalenyl]-6-(trifluoromethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-amine
Synonym: EP-0035985
MF: C₁₇H₁₅F₃N₄
FW: 332.3
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

MTK 458 is supplied as a solid. A stock solution may be made by dissolving the MTK 458 in the solvent of choice, which should be purged with an inert gas. MTK 458 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

MTK 458 is a PTEN-inducible putative kinase 1 (PINK1) activator.¹ It, in combination with the mitochondria uncoupler FCCP (Item No. 15218), increases levels of PINK1 and phosphorylated ubiquitin (pUb) in HeLa cervical cancer cells when used at a concentration of 6.6 μM. MTK 458, in combination with FCCP, induces mitophagy in HeLa cells (EC₅₀ = 0.44 μM). It inhibits doxycycline-induced increases in the mitochondrial levels of insoluble ornithine transcarbamylase (OTC) in HeLa cells when used at concentrations of 25 or 50 μM. *In vivo*, MTK 458 (50 mg/kg per day) decreases the midbrain levels of total α-synuclein and insoluble α-synuclein aggregates in a mouse model of Parkinson's disease induced by α-synuclein injection in the ipsilateral striatum.

Reference

1. De Roulet, D., Bartholomeus, J., Johnstone, S., *et al.* Compositions and methods of using the same for treatment of neurodegenerative and mitochondrial disease. *Mitokonon, Inc.* **WO2020/206363A1** (2020).

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.

WARRANTY AND LIMITATION OF REMEDY

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