

Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 MTK458

 Cat. No.
 :
 PC-49861

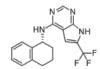
 CAS No.
 :
 2499962-58-0

 Molecular Formula
 :
 C₁₇H₁₅F₃N₄

 Molecular Weight
 :
 332.33

 Target
 :
 Mitophagy

 Solubility
 :
 10 mM in DMSO



Biological Activity

MTK458 (MTK-458) is a potent, selective and brain penetrant **PINK1 activator**, MTK-458 promotes the first step in mitophagy.

MTK458 selectively activates PINK1 by stimulating dimerization and stabilization of the PINK1/TOM complex.

MTK458 binds to PINK1 and stabilizes an active heterocomplex, thereby increasing mitophagy.

MTK458 reduces the PINK1 substrate pS65-Ubiquitin (pUb) in primary neurons and in vivo.

MTK458 drives clearance of pathologic α -synuclein in vitro and in vivo, decreases pS129 α -synuclein aggregates and normalized both brain and corresponding plasma pUb levels in both cellular and animal models of α -synuclein aggregation (PD-like pathology).

References

Chin RM, et al. bioRxiv. 2023 Feb 15:2023.02.14.528378.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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