

Product Datasheet

Miro1 Reducer

Catalog No. **BP-00148A** · CAS **2624336-91-8** · Form **salt · hydrochloride** · Physical state **solid** · Color **Off-white to yellow** · Version **1.0** · Revision **2026-10-08**

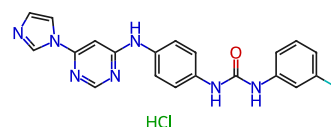
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Target Mitophagy	Research area Neurological Disease
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Molecular formula **C₂₀H₁₇ClFN₇O**

Molecular weight **425.8470**

STRUCTURE



DESCRIPTION

Miro1 Reducer is a small molecule that can repair this defect of Miro1 in Parkinson's disease (PD) fibroblasts. Miro1 Reducer reduces the delayed mitophagy phenotype in PD fibroblasts. Miro1 Reducer reduces Miro1 protein levels in dose-dependent manner (IC₅₀ = 7.8 mM).

BIOLOGICAL ACTIVITY

In Vitro

Miro1 Reducer (10 μM; 30 h) promotes Miro1 degradation following CCCP (HY-100941) treatment in fibroblasts from a sporadic PD patient.

Miro1 Reducer (5 μM; 30 h) can completely rescue stress-induced neurodegeneration in dopaminergic neurons derived from PD patients.

In Vivo

Miro1 Reducer (2.5 μM) extends the shortened lifespan of SNCAA53T flies, rescues age-dependent dopaminergic neuron loss in three PD models, and ameliorates motor decline in LRRK2 and PINK1 models.

SOLUBILITY

Soluble in DMSO

In vitro DMSO : 62.5 mg/mL

REFERENCES

[1]. Hsieh CH, et al. Miro1 Marks Parkinson's Disease Subset and Miro1 Reducer Rescues Neuron Loss in Parkinson's Models. Cell Metab. 2019 Dec 3;30(6):1131-1140.e7.

Lot CoA and SDS are separate documents.