

## **Data Sheet**

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 Product Name
 : RH01386

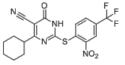
 Cat. No.
 : PC-62381

 CAS No.
 : 301177-36-6

 Molecular Formula
 : C<sub>18</sub>H<sub>15</sub>F<sub>3</sub>N<sub>4</sub>O<sub>3</sub>S

Molecular Weight : 424.398
Target : Amyloids

**Solubility** : 10 mM in DMSO



## **Biological Activity**

RH01386 (ZPD-2) is a small molecule that protect pancreatic  $\beta$  cells against endoplasmic reticulum stress-induced cell death, also is a small molecule inhibitor of  $\alpha$ -Synuclein ( $\alpha$ -Syn) aggregation, inhibits the aggregation of wild-type  $\alpha$ -Syn and the A30P and H50Q familial variants in vitro.

RH01386 (ZPD-2) increases the survival of human primary  $\beta$  cells and rodent  $\beta$  cell lines subjected to ER stressors including palmitate; also restores ER stress-impaired glucose-stimulated insulin secretion responses.

ZPD-2 inhibits the aggregation of wild-type (WT)  $\alpha$ -Syn, the A30P and H50Q familial mutants, being active against the seeded polymerization of different  $\alpha$ -Syn strains.

ZPD-2 prevents the spreading of  $\alpha$ -Syn seeds in protein misfolding cyclic amplification assays.

ZPD-2 is active against different  $\alpha$ -Syn strains and blocks their seeded polymerization.

ZPD-2 reduces the number of  $\alpha$ -Syn inclusions and decreases synuclein-induced DA neurons degeneration in two different PD Caenorhabditis elegans models that express  $\alpha$ -Syn either in muscle or in dopaminergic (DA) neurons.

## References

Tran K, et al. **ACS Chem Biol.** 2014 Dec 19;9(12):2796-806. 2. Pena-Diaz S., et al. **Front. Mol. Neurosci.** 2019;12:306.

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

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