## Product Datasheet

# GNE-8505

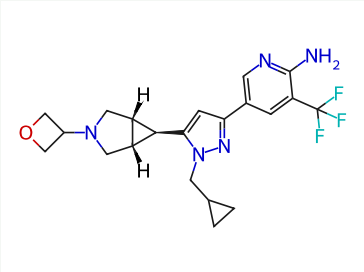
Catalog No. **BP-01907** · CAS **1620573-48-9** · Form **free base** · Physical state **solid** · Color **white to off-white** · Version **1.0** · Revision **2026-09-04**

**FOR RESEARCH USE ONLY. NOT FOR HUMAN OR VETERINARY USE.**

| Target | Research area |
|---|---|
| **MAP3K; JNK** | **Neurological Disease; Metabolic Disease** |

| | |
|---|---|
| Molecular formula | **$C_{21}H_{24}F_3N_5O$** |
| Molecular weight | **419.4434** |

**STRUCTURE**



## DESCRIPTION

GNE-8505 is an orally available inhibitor of Dual leucine zipper kinase (DLK) .

## BIOLOGICAL ACTIVITY

In Vivo

GNE-8505 (3-18 mg/kg; p.o.; single administration) rapidly and dose-dependently reduces injury-induced phosphorylated c-Jun levels in the retina of mice, with an in vivo IC50 of 0.98 μM.

Single administration of GNE-8505 (35 mg/kg) significantly reduces the number of phosphorylated c-Jun-positive cells in the spinal cord of SOD1G93A ALS mice at the middle stage of the disease.

## SOLUBILITY

Soluble in DMSO : 100 mg/mL

## REFERENCES

[1]. Acar D, et al. Effect of Dual Leucine Zipper Kinase Inhibitor GNE-3511 on Epileptogenesis and Cognitive and Behavioral Changes in a Temporal Lobe Epilepsy Model in Mice. bioRxiv, 2023: 2023.06. 11.544443.

[2]. Le Pichon CE, et al. Loss of dual leucine zipper kinase signaling is protective in animal models of neurodegenerative disease. Sci Transl Med. 2017;9(403):eaag0394.

[3]. Siu M, et al. JW. Dual Leucine Zipper Kinase Inhibitors for the Treatment of Neurodegeneration. J Med Chem. 2018 Sep 27;61(18):8078-8087.