Product Datasheet

N106

Catalog No. **BP-02211** · CAS **862974-25-2** · Form **free base** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-09-07**

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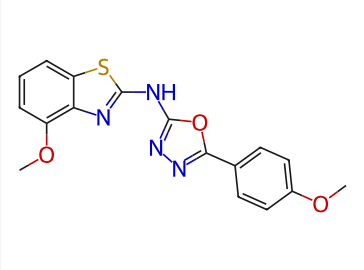
Target	Research area
Calcium Channel; E1/E2/E3 Enzyme	**Cardiovascular Disease**

Molecular formula	**$C_{17}H_{14}N_4O_3S$**
Molecular weight	**354.3830**

STRUCTURE



DESCRIPTION

N106 is a first-in-class sarcoplasmic reticulum calcium ATPase (SERCA2a) SUMOylation activator. N106 directly activates the SUMO-activating enzyme, E1 ligase. N106 can be used for heart failure research[1].

BIOLOGICAL ACTIVITY

In Vitro

N106 treatment increases contractile properties of cultured rat cardiomyocytes. N106 increases cell contractility, calcium-transient SERCA2a's ATPase activity and SUMOylation within 10?min of exposure, and these effects are sustained at 24?h in cardiomyocytes.

In Vivo

In a murine model, the half-life of N106 is determined to be □ 65.4?min with a Cmax of □ 2.24?μM when the mice received 10?mg/kg of N106 by intravenous injection. The oral bioavailability (F%) is 56% and 50%, and terminal elimination half-life (t1/2) is 19?min.

? In vivo, N106 (10 mg/kg) increases cardiac SERCA2A SUMOylation, and significantly improves ventricular function in mice with heart failure.

SOLUBILITY

soluble in DMSO

REFERENCES

[1]. Changwon Kho, et al. Small-molecule activation of SERCA2a SUMOylation for the treatment of heart failure. Nat Commun. 2015 Jun 12;6:7229.

Lot CoA and SDS are separate documents.