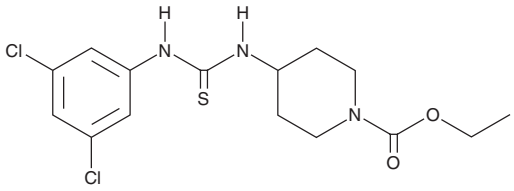
PRODUCT INFORMATION

TT01001

Item No. 46408

CAS Registry No.: 1022367-69-6
Formal Name: 4-[[[(3,5-dichlorophenyl) amino]thioxomethyl]amino]-1-piperidinecarboxylic acid, ethyl ester
MF: $C_{15}H_{19}Cl_2N_3O_2S$
FW: 376.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

TT01001 is supplied as a solid. A stock solution may be made by dissolving the TT01001 in the solvent of choice, which should be purged with an inert gas. TT01001 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

TT01001 is a ligand of mitoNEET, a mitochondrial outer membrane protein.[1] It binds to mitoNEET but does not activate peroxisome proliferator-activated receptor γ (PPARγ) in cell-free assays. TT01001 (100 mg/kg, p.o.) reduces skeletal muscle mitochondrial complex II-III activity and decreases plasma free fatty acids and blood glucose levels but does not increase body weight in a *db/db* mouse model of diabetes. It also inhibits monoamine oxidase B (MAO-B; IC_{50} = 8.84 µM).[2]

References

1. Takahashi, T., Yamamoto, M., Amikura, K., *et al*. A novel MitoNEET ligand, TT01001, improves diabetes and ameliorates mitochondrial function in db/db mice. *J. Pharmacol. Exp. Ther.* **352(2)**, 338-345 (2015).
2. Barbosa Belchior, M., Kane, R.T., Huber, J.D., *et al*. Synthesis and evaluation of enzyme inhibition by novel TT01001 derivatives as monoamine oxidase B inhibitors. *Bioorg. Med. Chem. Lett*. **117**, 130045 (2025).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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