

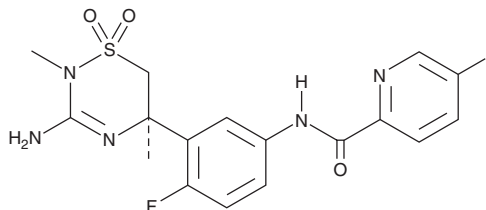
PRODUCT INFORMATION



Verubecestat

Item No. 21115

CAS Registry No.: 1286770-55-5
Formal Name: N-[3-[(5R)-3-amino-5,6-dihydro-2,5-dimethyl-1,1-dioxido-2H-1,2,4-thiadiazin-5-yl]-4-fluorophenyl]-5-fluoro-2-pyridinecarboxamide
Synonym: MK-8931
MF: C₁₇H₁₇F₂N₅O₃S
FW: 409.4
Purity: ≥98%
UV/Vis.: λ_{max}: 278 nm
Supplied as: A crystalline 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

Verubecestat is supplied as a crystalline solid. A stock solution may be made by dissolving the verubecestat in the solvent of choice. Verubecestat is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 35 mg/ml.

Description

Verubecestat is an inhibitor of β -site amyloid precursor protein cleaving enzyme 1 (BACE1) and BACE2 ($K_s = 2.2$ and 0.38 nM, respectively).¹ It has a high selectivity for BACE1 and BACE2 over closely related aspartyl proteases, including cathepsin D.¹ Formulations containing verubecestat profoundly lower levels of β -amyloid proteins in brain and cerebrospinal fluid (CSF) in rats and nonhuman primates and in CSF in humans.^{1,2}

References

1. Scott, J.D., Li, S.W., Brunskill, A.P.J., *et al.* Discovery of the 3-Imino-1,2,4-thiadiazinane 1,1-dioxide derivative verubecestat (MK-8931) - A β -site amyloid precursor protein cleaving enzyme 1 inhibitor for the treatment of Alzheimer's disease. *J. Med. Chem.* **59**(23), 10435-10450 (2016).
2. Kennedy, M.E., Stamford, A.W., Chen, X., *et al.* The BACE1 inhibitor verubecestat (MK-8931) reduces CNS β -amyloid in animal models and in Alzheimer's disease patients. *Sci. Transl. Med.* **8**(363), 363ra150 (2016).

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.

Copyright Cayman Chemical Company, 12/22/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM