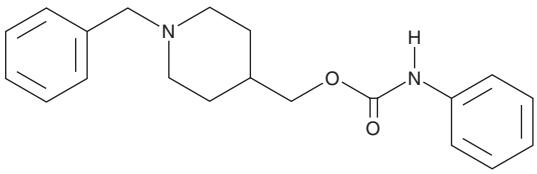
PRODUCT INFORMATION

AChE/BChE/MAO-B-IN-I

Item No. 46948

CAS Registry No.: 2416910-82-0
Formal Name: (1-benzylpiperidin-4-yl)methyl phenylcarbamate
Synonyms: Acetylcholinesterase/Butyrylcholinesterase/Monoamine Oxidase B Inhibitor I, AchE/BChE/MAO-B Inhibitor I
MF: $C_{20}H_{24}N_2O_2$
FW: 324.4
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

AChE/BChE/MAO-B-IN-I is supplied as a solid. A stock solution may be made by dissolving the AChE/BChE/MAO-B-IN-I in the solvent of choice, which should be purged with an inert gas. AChE/BChE/MAO-B-IN-I is soluble (≥10 mg/ml) in DMSO. AChE/BChE/MAO-B-IN-I is slightly soluble (0.1-1 mg/ml) in ethanol.

Description

AChE/BChE/MAO-B-IN-I is an inhibitor of acetylcholinesterase (AChE), butyrylcholinesterase (BChE), and monoamine oxidase B (MAO-B; IC_{50}s = 7.31, 0.555, and 26.1 µM, respectively).[1] It is selective for these enzymes over MAO-A (IC_{50} = >100 µM). AChE/BChE/MAO-B-IN-I inhibits cytotoxicity induced by amyloid-β (1-42) (Aβ42) in SH-SY5Y cells at 20 µM but does not inhibit aggregation of Aβ42 in a cell-free assay at 10 µM.

Reference

1. Košak, U., Strašek, N., Knez, D., *et al.* N-alkylpiperidine carbamates as potential anti-Alzheimer's agents. *Eur. J. Med. Chem.* **197:112282**, (2020).

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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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