

PRODUCT INFORMATION

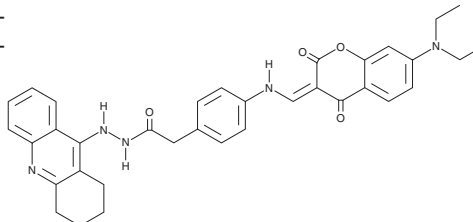


PE154

Item No. 42396

CAS Registry No.: 1192750-33-6
Formal Name: 4-[[[7-(diethylamino)-2,4-dioxo-2H-1-benzopyran-3(4H)-ylidene]methyl]amino]-benzeneacetic acid, 2-(1,2,3,4-tetrahydro-9-acridinyl)hydrazide

MF: C₃₅H₃₅N₅O₄
FW: 589.7
Purity: ≥98%
Ex./Em. Max: 405/517 nm
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

PE154 is supplied as a solid. A stock solution may be made by dissolving the PE154 in the solvent of choice, which should be purged with an inert gas. PE154 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

PE154 is an inhibitor of acetylcholinesterase (AChE) and butyrylcholinesterase (BChE; IC₅₀s = 0.28 and 16 nM, respectively).¹ It is also a fluorescent probe for amyloid- β (A β) plaques that displays excitation and emission maxima of 405 and 517 nm, respectively. PE154 selectively binds to A β over phosphorylated tau in a 3xTg mouse model of Alzheimer's disease when delivered *via* intrahippocampal administration of nanoparticles containing PE154.²

References

1. Elsinghorst, P.W., Härtig, W., Goldhammer, S., *et al.* A gorge-spanning, high-affinity cholinesterase inhibitor to explore β -amyloid plaques. *Org. Biomol. Chem.* **7**(19), 3940-3946 (2009).
2. Härtig, W., Kacza, J., Paulke, B.R., *et al.* *In vivo* labelling of hippocampal β -amyloid in triple-transgenic mice with a fluorescent acetylcholinesterase inhibitor released from nanoparticles. *Eur. J. Neurosci.* **31**(1), 99-109 (2010).

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

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