

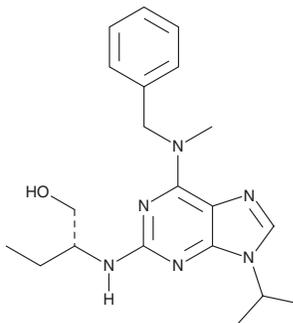
PRODUCT INFORMATION



Aftin-4

Item No. 27341

CAS Registry No.: 866893-90-5
Formal Name: 2R-[[9-(1-methylethyl)-6-[methyl(phenylmethyl)amino]-9H-purin-2-yl]amino]-1-butanol
MF: C₂₀H₂₈N₆O
FW: 368.5
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

Aftin-4 is supplied as a solid. A stock solution may be made by dissolving the aftin-4 in the solvent of choice, which should be purged with an inert gas. Aftin-4 is soluble in the organic solvent DMSO.

Description

Aftin-4 is an inducer of amyloid- β (1-42) (A β 42).¹ It selectively increases extracellular A β 42 over A β 40 production in N2a-A β PP695 cells when used at concentrations ranging from 1 to 100 nM. *In vivo*, aftin-4 (3-20 nmol/animal, i.c.v.) increases hippocampal A β 42 content, lipid peroxidation, and production of the pro-inflammatory cytokines IL-1 β , IL-6, and TNF- α in mice.² It also induces spatial working and spatial reference memory deficits in mice, effects that are reversed by co-administration of the γ -secretase inhibitor BMS-299,897.

References

- Hochard, A., Oumata, N., Bettayeb, K., *et al.* Aftins increase amyloid- β ₄₂, lower amyloid- β ₃₈, and do not alter amyloid- β ₄₀ extracellular production *in vitro*: Toward a chemical model of Alzheimer's disease? *J. Alzheim. Dis.* **35(1)**, 107-120 (2013).
- Meunier, J., Borjini, N., Gillis, C.N., *et al.* Brain toxicity and inflammation induced *in vivo* in mice by the amyloid- β forty-two inducer aftin-4, a roscovitine derivative. *J. Alzheim. Dis.* **44(2)**, 507-524 (2015).

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.

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