

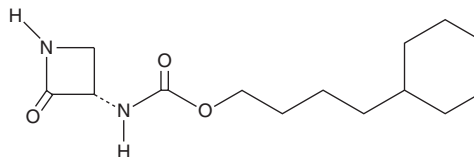
PRODUCT INFORMATION



ARN726

Item No. 24259

CAS Registry No.: 1628343-77-0
Formal Name: N-[(3S)-2-oxo-3-azetidiny]-carbamic acid, 4-cyclohexylbutyl ester
MF: C₁₄H₂₄N₂O₃
FW: 268.4
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

ARN726 is supplied as a crystalline solid. A stock solution may be made by dissolving the ARN726 in the solvent of choice. ARN726 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of ARN726 in these solvents is approximately 33 mg/ml.

ARN726 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ARN726 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. ARN726 has a solubility of approximately 0.20 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ARN726 is an inhibitor of N-acylethanolamine acid amidase (NAAA; IC₅₀s = 27 and 63 nM for the human and rat enzyme, respectively).¹ It is selective for NAAA over fatty acid amide hydrolase (FAAH) and acid ceramidase (IC₅₀s = >100 and 12.5 μM, respectively), as well as a panel of 28 lipid metabolism- and inflammation-related enzymes at 10 μM. ARN726 (1-30 mg/kg) decreases lung myeloperoxidase activity and pleural exudate TNF-α levels in a mouse model of carrageenan-induced lung inflammation. It inhibits NAAA and reverses complete Freund's adjuvant-induced decreases in palmitoyl ethanolamide (PEA; Item No. 90350) and oleoyl ethanolamide (OEA; Item No. 90265) levels in inflamed paw tissue in a rat model of arthritis.²

References

1. Ribeiro, A., Pontis, S., Mengatto, L., *et al.* A potent systematically active N-acylethanolamine acid amidase inhibitor that suppresses inflammation and human macrophage activation. *Chem. Biol.* **10(8)**, 1838-1846 (2015).
2. Bonezzi, F.T., Sasso, O., Pontis, S., *et al.* An important role for N-acylethanolamine acid amidase in the complete Freund's adjuvant rat model of arthritis. *J. Pharmacol. Exp. Ther.* **356(3)**, 656-663 (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

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