PRODUCT INFORMATION



UAMC 0039 (hydrochloride)

Item No. 15340

CAS Registry No.: 697797-51-6

Formal Name: (2S)-2-amino-4-[[(4-chlorophenyl)methyl]

amino]-1-(1-piperidinyl)-1-butanone,

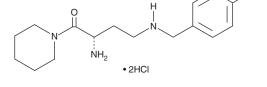
dihydrochloride

MF: C₁₆H₂₄CIN₃O • 2HCI

FW: 382.8 **Purity:** ≥98% UV/Vis.: λ_{max} : 220 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

UAMC 0039 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the UAMC 0039 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. UAMC 0039 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of UAMC 0039 (hydrochloride) in these solvents is approximately 5, 14, and 2 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of UAMC 0039 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of UAMC 0039 (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

UAMC 0039 is a potent inhibitor of dipeptidyl peptidase 2 (DPP-2; IC₅₀ = 0.48 nM).¹ It also inhibits DPP-4 $(IC_{50} = 165 \mu M)$. DPP-2 is thought to be involved in degradation of collagen, substance P, and some prolinecontaining neuropeptides. 1-3

References

- 1. Senten, K., Van der Veken, P., De Meester, I., et al. γ-amino-substituted analogues of 1-[(S)-2,4diaminobutanoyl]piperidine as highly potent and selective dipeptidyl peptidase II inhibitors. J. Med. Chem. **47(11)**, 2906-2916 (2004).
- 2. Andersen, K.J., and McDonald, J.K. Lysosomal heterogeneity of dipeptidyl peptidase II active on collagenrelated peptides. Ren. Physiol. Biochem. 12(1), 32-40 (1989).
- Mentlein, R., and Struckhoff, G. Purification of two dipeptidyl aminopeptidases II from rat brain and their action on proline-containing neuropeptides. J. Neurochem. 52(4), 1284-1293 (1989).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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