

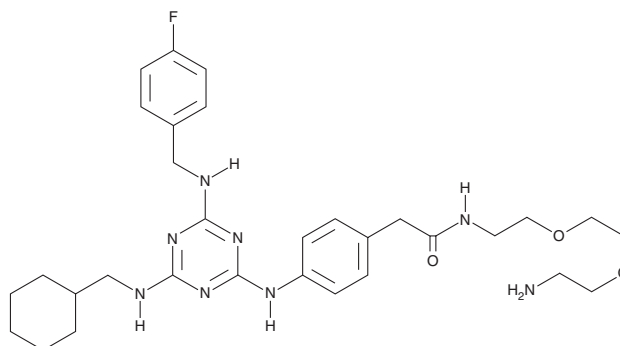
PRODUCT INFORMATION



AP-III-a4

Item No. 19933

CAS Registry No.: 1177827-73-4
Formal Name: N-[2-[2-(2-aminoethoxy)ethoxy]ethyl]-4-[[4-[(cyclohexylmethyl)amino]-6-[[[4-fluorophenyl)methyl]amino]-1,3,5-triazin-2-yl]amino]-benzeneacetamide
Synonym: ENOblock
MF: C₃₁H₄₃FN₈O₃
FW: 594.7
Purity: ≥95%
UV/Vis.: λ_{max}: 211, 268 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

AP-III-a4 is supplied as a crystalline solid. A stock solution may be made by dissolving the AP-III-a4 in the solvent of choice, which should be purged with an inert gas. AP-III-a4 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AP-III-a4 in these solvents is approximately 30 mg/ml.

AP-III-a4 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AP-III-a4 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. AP-III-a4 has a solubility of approximately 0.2 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

AP-III-a4 is a small molecule enolase inhibitor (IC₅₀ = 0.576 μM) that inhibited cancer cell metastasis in an *in vivo* zebrafish cancer cell xenograft model.¹ It also reduced hyperglycemia and hyperlipidemia in C57BL/Ksj-*db/db* mice, a transgenic model of type 2 diabetes.² Another study found that AP-III-a4 did not directly block enolase activity *in vitro* and suggested the mechanism is indirect.³

References

1. Jung, D.-W., Kim, W.-H., Park, S.-H., *et al.* A unique small molecule inhibitor of enolase clarifies its role in fundamental biological processes. *ACS Chem Biol.* **8**(6), 1271-1282 (2013).
2. Cho, H., Um, J., Lee, J.-H., *et al.* ENOblock, a unique small molecule inhibitor of the non-glycolytic functions of enolase, alleviates the symptoms of type 2 diabetes. *Sci. Rep.* **7**, 44186 (2017).
3. Satani, N., Lin, Y.-H., Hammoudi, N., *et al.* ENOblock does not inhibit the activity of the glycolytic enzyme enolase. *PLoS One* **11**(12), e0168739 (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.

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