

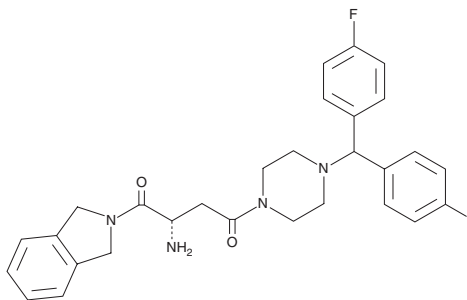
PRODUCT INFORMATION



1G244

Item No. 18306

CAS Registry No.: 847928-32-9
Formal Name: 2S-amino-4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-1-(1,3-dihydro-2H-isindol-2-yl)-1,4-butanedione
Synonym: PTX1210
MF: C₂₉H₃₀F₂N₄O₂
FW: 504.6
Purity: ≥95%
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

1G244 is supplied as a solid. A stock solution may be made by dissolving the 1G244 in the solvent of choice, which should be purged with an inert gas. 1G244 is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

1G244 is an inhibitor of dipeptidyl peptidase 8 (DPP-8) and DPP-9 (IC₅₀s = 14 and 53 nM, respectively).¹ It is selective for DPP-8 and DPP-9 over DPP-4, DPP-2, and fibroblast activation protein (FAP; IC₅₀s = >100 μM for all). 1G244 (20 μM) inhibits the differentiation of 3T3-L1 cells into adipocytes.² It induces caspase-1-dependent pyroptosis in RAW 264.7 macrophages when used at a concentration of 10 μM.³ 1G244 (2 mg/kg) decreases atherosclerotic lesion area and M1-like macrophage plaque infiltration in *apoE*^{-/-} mice in a model of atherosclerosis induced by a high-fat diet.⁴

References

1. Wu, J.J., Tang, H.K., Yeh, T.K., *et al.* Biochemistry, pharmacokinetics, and toxicology of a potent and selective DPP8/9 inhibitor. *Biochem. Pharmacol.* **78(2)**, 203-210 (2009).
2. Han, R., Wang, X., Bachovchin, W., *et al.* Inhibition of dipeptidyl peptidase 8/9 impairs preadipocyte differentiation. *Sci. Rep.* **5(12348)**, 1-11 (2015).
3. Okondo, M.C., Johnson, D.C., Sridharan, R., *et al.* DPP8 and DPP9 inhibition induces pro-caspase-1-dependent monocyte and macrophage pyroptosis. *Nat. Chem. Biol.* **13(1)**, 46-53 (2017).
4. Wiśniewska, A., Czepiel, K., Stachowicz, A., *et al.* The antiatherosclerotic action of 1G244 - An inhibitor of dipeptidyl peptidases 8/9 - is mediated by the induction of macrophage death. *Eur. J. Pharmacol.* **944**, 175566 (2023).

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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