

PRODUCT INFORMATION



GW 280264X

Item No. 31388

CAS Registry No.: 866924-39-2

Formal Name: N-[(5S)-5-[[[(2R,3S)-3-(formylhydroxyamino)-2-(2-methylpropyl)-1-oxohexyl]amino]-6-oxo-6-(2-thiazolylamino)hexyl]-carbamic acid, pentylmethyl ester

MF: C₂₈H₄₁N₅O₆S

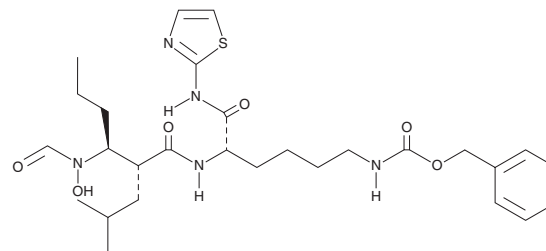
FW: 575.7

Purity: ≥95%

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

GW 280264X is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 280264X in the solvent of choice, which should be purged with an inert gas. GW 280264X is soluble in DMSO.

Description

GW 280264X is an inhibitor of disintegrin and metalloproteinase domain-containing protein 17/TNF- α converting enzyme (ADAM17/TACE) and ADAM10 (IC₅₀s = 8 and 11.5 nM, respectively).¹ It inhibits TNF- α -induced cleavage of endomucin in human umbilical vein endothelial cells (HUVECs) when used at a concentration of 10 μ M.² GW 280264X (1 and 10 μ M) inhibits angiotensin-converting enzyme 2 (ACE2) ectodomain shedding induced by phorbol 12-myristate 13-acetate (PMA; Item No. 10008014) in HEK-ACE2 cells.³ It reduces ACE2 shedding and prevents severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in HK-2 cells.⁴

References

- 1 Hundhausen, C., Misztela, D., Berkout, T.A., *et al.* The disintegrin-like metalloproteinase ADAM10 is involved in constitutive cleavage of CX3CL1 (fractalkine) and regulates CX3CL1-mediated cell-cell adhesion. *Blood* **102**(4), 1186-1195 (2003).
- 2 Yang, J., LeBlanc, M.E., Cano, I., *et al.* ADAM10 and ADAM17 proteases mediate proinflammatory cytokine-induced and constitutive cleavage of endomucin from the endothelial surface. *J. Biol. Chem.* **295**(19), 6641-6651 (2020).
- 3 Lambert, D.W., Yarski, M., Warner, F.J., *et al.* Tumor necrosis factor- α convertase (ADAM17) mediates regulated ectodomain shedding of the severe-acute respiratory syndrome-coronavirus (SARS-CoV) receptor, angiotensin-converting enzyme-2 (ACE2). *J. Biol. Chem.* **280**(34), 30113-30119 (2005).
- 4 Yeung, M.L., Teng, J.L.L., Jia, L., *et al.* Soluble ACE2-mediated cell entry of SARS-CoV-2 via interaction with proteins related to the renin-angiotensin system. *Cell* **184**, 1-17 (2021).

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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