

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



PRODUCT INFORMATION



FPS-7M1

Item No. 11909

CAS Registry No.: 945714-67-0

Formal Name: 4-chloro-N-cyclohexyl-N-

(phenylmethyl)-benzamide

MF: C₂₀H₂₂CINO FW: 327.9 **Purity:** ≥98%

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.



FPS-ZM1 is supplied as a crystalline solid. A stock solution may be made by dissolving the FPS-ZM1 in the solvent of choice. FPS-ZM1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of FPS-ZM1 in these solvents is approximately 15, 25, and 30 mg/ml, respectively.

FPS-ZM1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, FPS-ZM1 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. FPS-ZM1 has a solubility of approximately 0.12 mg/ml in a 1:7 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

FPS-ZM1 is a high-affinity inhibitor of the receptor for advanced glycation end products (RAGE; $K_i = 25$ nM).¹ It blocks the binding of amyloid β (A β) protein to RAGE and inhibits Aβ40- and Aβ42-induced cellular stress in RAGE-expressing cells. PPS-ZM1 is functional in mice when administered intraperitoneally and penetrates the blood-brain barrier (BBB), inhibiting β-secretase activity, Aß production, microglia activation, and neuroinflammation.^{1,2} FPS-ZM1 is used to elucidate the role of RAGE-mediated signaling in diverse physiological processes in vivo, including cancer tumor growth, angiogenesis, and metastasis, as well as BBB damage, edema, and inflammation after intracerebral hemorrhage.3,4

References

- 1. Deane, R., Singh, I., Sagare, A.P., et al. A multimodal RAGE-specific inhibitor reduces amyloid β-mediated brain disorder in a mouse model of Alzheimer disease. J. Clin. Invest. 122(4), 1377-1392 (2012).
- 2. Hong, Y., Shen, C., Yin, Q., et al. Effects of RAGE-specific inhibitor FPS-ZM1 on amyloid-β metabolism and AGEs-induced inflammation and oxidative stress in rat hippocampus. Neurochem. Res. 41(5), 1192-1199 (2016).
- 3. Kwak, T., Drews-Elger, K., Ergonul, A., et al. Targeting of RAGE-ligand signaling impairs breast cancer cell invasion and metastasis. Oncogene (2016).
- Yang, F., Wang, Z., Zhang, J.H., et al. Receptor for advanced glycation end-product antagonist reduces blood-brain barrier damage after intracerebral hemorrhage. Stroke 46(5), 1328-1336 (2015).

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

al 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/10/2018

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA **PHONE:** [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM