PRODUCT INFORMATION



Ceapin-A7

Item No. 36113

CAS Registry No.: 2323027-38-7

Formal Name: N-[1-[[2,4-bis(trifluoromethyl)phenyl]

methyl]-1H-pyrazol-4-yl]-5-(2-furanyl)-

3-isoxazolecarboxamide

MF: $C_{20}H_{12}F_6N_4O_3$

470.3 FW: ≥98% **Purity:** Supplied as: A solid Storage: -20°C Stability: ≥4 vears

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ceapin-A7 is supplied as a solid. A stock solution may be made by dissolving the ceapin-A7 in the solvent of choice, which should be purged with an inert gas. Ceapin-A7 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ceapin-A7 in these solvents is approximately 1 and 5 mg/ml, respectively.

Description

Ceapin-A7 is an inhibitor of activating transcription factor 6α (ATF6 α ; IC₅₀ = 0.59 μ M in a reporter assay). It is selective for ATF6 α over ATF6 β at 18.9 μ M. Ceapin-A7 (6 μ M) sensitizes U2OS osteosarcoma cells to the sarcoplasmic/endoplasmic reticulum Ca²⁺-ATPase (SERCA) inhibitor and ER stress inducer thapsigargin (Item No. 10522). Chondrocyte-conditioned media from primary human chondrocytes pre-incubated with ceapin-A7 (0.5 μ M) prior to stimulation with TNF- α , IFN- γ , or IL-17 has a reduced ability to induce tube formation in human umbilical vein endothelial cells (HUVECs).² Ceapin-A7 ($15 \mu M$) inhibits viral RNA production in Vero cells infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).³

References

- 1. Gallagher, C.M., Garri, C., Cain, E.L., et al. Ceapins are a new class of unfolded protein response inhibitors, selectively targeting the ATF6α branch. Elife 5, e11878 (2016).
- Ma, M., Li, H., Wang, P., et al. ATF6 aggravates angiogenesis-osteogenesis coupling during ankylosing spondylitis by mediating FGF2 expression in chondrocytes. iScience 24(7), 102791 (2021).
- Echavarría-Consuegra, L., Cook, G.M., Busnadiego, I., et al. Manipulation of the unfolded protein response: A pharmacological strategy against coronavirus infection. PLoS Pathog. 17(6), e1009644 (2021).

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

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

Copyright Cayman Chemical Company, 10/19/2022

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