

PRODUCT INFORMATION



iCRT3

Item No. 40836

CAS Registry No.: 901751-47-1

Formal Name: 2-[[[2-(4-ethylphenyl)-5-methyl-4-oxazolyl]methyl]thio]-N-(2-phenylethyl)-acetamide

MF: $C_{23}H_{26}N_2O_2S$

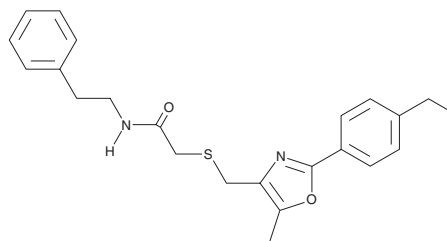
FW: 394.5

Purity: $\geq 95\%$

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

iCRT3 is supplied as a solid. A stock solution may be made by dissolving the iCRT3 in the solvent of choice, which should be purged with an inert gas. iCRT3 is soluble (≥ 10 mg/ml) in ethanol and DMSO.

Description

iCRT3 is an inhibitor of β -catenin-responsive transcription (CRT).¹ It inhibits Wnt signaling in a reporter assay using HEK293 cells ($IC_{50} = 8.2$ nM). It is selective for inhibition of the protein-protein interaction between β -catenin and T cell factor (Tcf) over the interaction between β -catenin and epithelial cadherin (E-cadherin) or α -catenin. iCRT3 (50 μM) inhibits neurotensin- or Wnt3a-induced increases in the proliferation of A172 and U87 glioblastoma cells.² It also reduces tumor growth in an A172 mouse xenograft model when administered at a dose of 5 mg/kg. iCRT3 (5 and 10 mg/kg) reduces plasma levels of IL-6, TNF- α , and IL-1 β , as well as the general organ damage marker aspartate aminotransferase (AST) and the liver damage marker alanine transaminase (ALT) in a mouse model of cecal ligation and puncture-induced sepsis.³ It also reduces lung cell apoptosis and the severity of sepsis-induced lung injury in the same model when administered at a dose of 10 mg/kg.

References

1. Gonsalves, F.C., Klein, K.O., Carson, B.B., *et al.* An RNAi-based chemical genetic screen identifies three small-molecule inhibitors of the Wnt/wingless signaling pathway. *Proc. Natl. Acad. Sci. USA* **108**(15), 5954-5963 (2011).
2. Xiao, H., Zeng, Y., Wang, Q., *et al.* A novel positive feedback loop between NTSR1 and Wnt/ β -Catenin contributes to tumor growth of glioblastoma. *Cell. Physiol. Biochem.* **43**(5), 2133-2142 (2017).
3. Sharma, A., Yang, W.-L., Ochani, M., *et al.* Mitigation of sepsis-induced inflammatory responses and organ injury through targeting Wnt/ β -catenin signaling. *Sci. Rep.* **7**(1), 9235 (2017).

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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