

PRODUCT INFORMATION

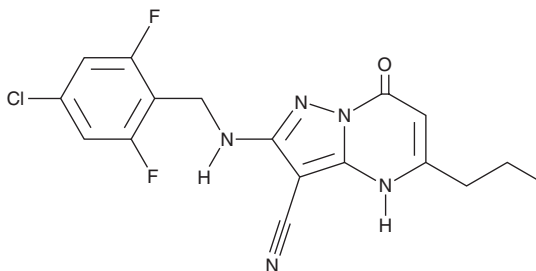


BCAT-IN-2

Item No. 45501

CAS Registry No.: 1800024-45-6
Formal Name: 2-[[[4-chloro-2,6-difluorophenyl)methyl]amino]-4,7-dihydro-7-oxo-5-propyl-pyrazolo[1,5-a]pyrimidine-3-carbonitrile

Synonym: BCAT2-IN-2
MF: C₁₇H₁₄ClF₂N₅O
FW: 377.8
Purity: ≥98%
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

BCAT-IN-2 is supplied as a solid. A stock solution may be made by dissolving the BCAT-IN-2 in the solvent of choice, which should be purged with an inert gas. BCAT-IN-2 is sparingly soluble (1-10 mg/ml) in acetonitrile.

Description

BCAT-IN-2 is an inhibitor of mitochondrial branched-chain amino acid transaminase (BCAT2; IC₅₀ = 50 nM in a cell-free assay).¹ It increases serum levels of leucine, isoleucine, and valine in mice when administered at doses of 10, 30, or 100 mg/kg five hours prior to an amino acid bolus. BCAT-IN-2 also reduces tumor size and metastasis in a DU145 prostate cancer mouse xenograft model.²

References

- Bertrand, S. M., Ancellin, N., Beaufils, B., *et al.* The discovery of *in vivo* active mitochondrial branched-chain aminotransferase (BCATm) inhibitors by hybridizing fragment and HTS hits. *J. Med. Chem.* **58**(18), 7140-7163 (2015).
- Mei, W., Wei, M., Tang, C., *et al.* BCAT2 binding to PCBP1 regulates the PI3K/AKT signaling pathway to inhibit autophagy-related apoptosis and ferroptosis in prostate cancer. *Cell Death Dis.* **16**(1), 337 (2025).

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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