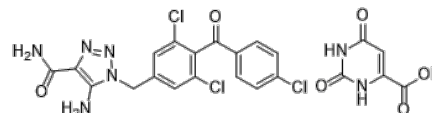


Product Name : Carboxyamidotriazole orotate
Cat. No. : PC-27440
CAS No. : 187739-60-2
Molecular Formula : C₂₂H₁₆Cl₃N₇O₆
Molecular Weight : 580.76
Target : Calcium Channel
Solubility : 10 mM in DMSO



Biological Activity

Carboxyamidotriazole orotate (L-651582, CAI) is a mitochondrial complex I inhibitor, inhibits oxidative phosphorylation in cancer cells, also is a non-voltage-dependent calcium channel blocker, inhibits tumor cell proliferation, metastasis, and angiogenesis.

Carboxyamidotriazole inhibits oxidative phosphorylation in cancer cells and exerts synergistic anti-cancer effect with glycolysis inhibition.

Carboxyamidotriazole has an anti-proliferative effect on ovarian carcinoma cell lines and strongly down-regulated Mcl-1 expression.

Carboxyamidotriazole inhibits store-operated calcium entry (SOCE) and Mcl-1 translation through mTORC1 deactivation.

Carboxyamidotriazole sensitizes ovarian carcinoma cells to anti-Bcl-xL strategies as their combination elicited massive apoptosis.

References

Xu Y, et al. Cell Death Dis. 2026 Jun 25. doi: 10.1038/s41419-026-09016-1.

Stephenson ZA, et al. Elife. 2020 May 20;9:e55845.

Bonnefond ML, et al. Oncotarget. 2018 Sep 21;9(74):33896-33911.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com