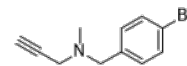


Product Name : PYCR1-IN-1
Cat. No. : PC-25725
CAS No. : 709-85-3
Molecular Formula : C₁₁H₁₂BrN
Molecular Weight : 238.13
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

PYCR1-IN-1 (ProPI-1, Proline Production Inhibitor-1) is a small molecule pyrroline-5-carboxylate reductase 1 (PYCR1) inhibitor with IC₅₀ of 8.8 μM.

PYCR1-IN-1 (ProPI-1) prevents the formation of proline in human breast cancer cell line (SUM-159-PT) with IC₅₀ of 1 μM, with no effect on the other amino acid levels.

PYCR1-IN-1 (ProPI-1) is approximately 20 times more potent than pargyline

PYCR1-IN-1 (ProPI-1) can control cell proliferation in two different breast cancer cell types MDA-MB-231 and SUM-159-PT, both cells have relatively high PYCR1 levels, and depend on PYCR1 activity for proliferation and tumor formation.

References

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Shin JH, et al. Exp Mol Med. 2025 Nov 18. doi: 10.1038/s12276-025-01577-z.

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

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