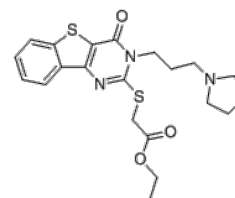


Product Name : ALDH1A1 inhibitor CM37
Cat. No. : PC-49239
CAS No. : 896795-60-1
Molecular Formula : C₂₁H₂₅N₃O₃S₂
Molecular Weight : 431.569
Target : Aldehyde Dehydrogenase (ALDH)
Solubility : 10 mM in DMSO



Biological Activity

ALDH1A1 inhibitor CM37 is a selective and competitive inhibitor of **ALDH1A1** with K_i of 300 nM, shows minimal inhibitory effects for ALDH1A2, ALDH1A3, ALDH2, or ALDH3A1 at 20 μM.

CM37 reduced ovarian cancer cell proliferation as spheroids under low attachment growth conditions and the expression of stemness-associated markers (OCT4 and SOX2) in ALDH+ cells fluorescence-activated cell sorting (FACS)-sorted from cell lines and malignant OC ascites.

CM37 promoted DNA damage in OC cells, as evidenced by induction of γH2AX.

CM37 augmented intracellular ROS accumulation, which in turn led to increased DNA damage and reduced OC cell viability.

References

Condello S., et al. *Oncogene*. 2015;34:2297–2308.

Nkechiyere G Nwani, et al. *Cancers (Basel)*. 2019 Apr 8;11(4):502.

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

E-mail: tech@probechem.com