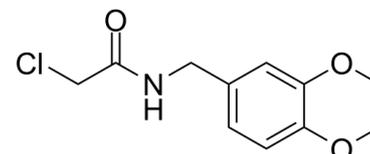


Data Sheet

Product Name:	DKM 2-93
Cat. No.:	CS-6514
CAS No.:	65836-72-8
Molecular Formula:	C ₁₁ H ₁₄ ClNO ₃
Molecular Weight:	243.69
Target:	E1/E2/E3 Enzyme
Pathway:	Metabolic Enzyme/Protease
Solubility:	DMSO : 125 mg/mL (512.95 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

DKM 2-93 is a relatively selective inhibitor of **UBA5** with an **IC₅₀** of 430 μ M. **IC₅₀ & Target:** IC₅₀: 430 μ M (UBA5), 90 μ M (PaCa2 cells), 30 μ M (Panc1 cells)^[1] **In Vitro:** Ubiquitin-like modifier activating enzyme 5 (UBA5) is a novel pancreatic cancer therapeutic target. DKM 2-93 impairs pancreatic cancer cell survival through covalently modifying the catalytic cysteine of UBA5, thereby inhibiting its activity as a protein that activates the ubiquitin-like protein UFM1 to UFMylate proteins. DKM 2-93 inhibits PaCa2 and Panc1 cells survival with IC₅₀s of 90 and 30 μ M, respectively^[1]. **In Vivo:** DKM 2-93 daily treatment significantly impairs tumor growth of PaCa2 cells in vivo in tumor xenograft studies in immune-deficient mice without causing any weight loss or overt toxicity^[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: DKM 2-93 is prepared in DMSO.^[1]PaCa2 and Panc1 cells are treated with 0-1000 μ M DKM 2-93 for 48 hours. Cell viability is assessed by Hoescht stain^[1]. **Animal Administration:** DKM 2-93 is prepared in DMSO.^[1]Mouse: Mice are subcutaneously injected with PaCa2 cells to initiate the tumor xenograft study and treatments of mice are initiated with vehicle or DKM 2-93 (50 mg/kg ip, once per day) three days after injection of cancer cells^[1].

References:

[1]. Roberts AM, et al. Chemoproteomic Screening of Covalent Ligands Reveals UBA5 As a Novel Pancreatic Cancer Target. ACS Chem Biol. 2017 Apr 21;12(4):899-904.

CAIndexNames:

Acetamide, 2-chloro-N-[(3,4-dimethoxyphenyl)methyl]-

SMILES:

O=C(NCC1=CC=C(OC)C(OC)=C1)CCl

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA