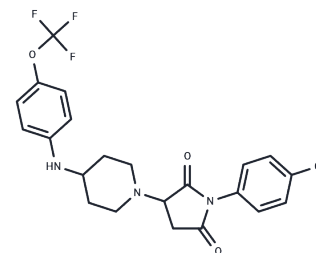


AKOS-22

Chemical Properties

CAS No. :	878983-38-1
Formula:	C ₂₂ H ₂₁ ClF ₃ N ₃ O ₃
Molecular Weight:	467.87
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	AKOS-22 is a potent mitochondrial protein VDAC1 (voltage-dependent anion channel 1) inhibitor (K _d =15.4 μM). AKOS-22 protects against mitochondrial dysfunction[1]. AKOS-22 interacts with VDAC1 and inhibiting both VDAC1 oligomerization and apoptosis.
Targets(IC ₅₀)	Others
In vitro	AKOS-22 inhibits selenite-induced VDAC1 oligomerization, Cyto c release and apoptosis in HEK-293 cells (IC ₅₀ =3.3-3.6 μM), and which prevents the elevation of [Ca ²⁺] _i associated with apoptosis induction, and thus Ca ²⁺ accumulation by the mitochondria[1]. AKOS-22 (5-20 μM; 2 hours) inhibits both VDAC1 oligomerization and apoptosis in a concentration-dependent manner (IC ₅₀ =7.5 μM)[1]. AKOS-22 (30 μM, 2 h) inhibits cisplatin-induced VDAC1 oligomerization and apoptosis in neuroblastoma cell line SH-SY5Y.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1373 mL	10.6867 mL	21.3735 mL
5 mM	0.4275 mL	2.1373 mL	4.2747 mL
10 mM	0.2137 mL	1.0687 mL	2.1373 mL
50 mM	0.0427 mL	0.2137 mL	0.4275 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Ben-Hail D, et al. Novel Compounds Targeting the Mitochondrial Protein VDAC1 Inhibit Apoptosis and Protect against Mitochondrial Dysfunction. Biol Chem. 2016 Nov 25;291(48):24986-25003.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481