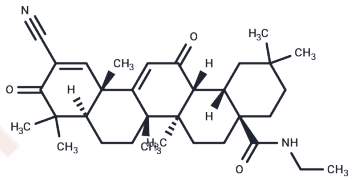
Data Sheet (Cat.No.T10733)

TargetMol

CDDO-EA

Chemical Properties



CAS No. : 932730-51-3

Formula: C33H46N2O3

Molecular Weight: 518.73

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	CDDO-EA (CDDO ethyl amide) is an activator of the Nrf2/antioxidant response element.
Targets(IC50)	Nrf2
In vitro	In a cell culture model of ALS, CDDO-EA potently activates Nrf2/ARE [1]. CDDO-EA induces apoptosis in A549 lung cancer cells and induces heme oxygenase-1. CDDO-EA is 7-fold more potent than CDDO as a suppressor of the ability of IFN-γ to induce iNOS in RAW264.7 macrophage-like cells[2].
In vivo	CDDO-EA-treated G93A mice live significantly longer than the control. CDDO-EA increases the life-span from 124.05 days to 144.72 days (16.6%). In CDDO-EA-treated G93A mice, the age of death is 141.4 days and the duration from the age of onset to the age of death is 57.6 days. The age of death from the onset is prolonged by 17.5 days (43%) [1].

Solubility Information

Solubility	DMSO: 28 mg/mL (53.98 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9278 mL	9.6389 mL	19.2779 mL
5 mM	0.3856 mL	1.9278 mL	3.8556 mL
10 mM	0.1928 mL	0.9639 mL	1.9278 mL
50 mM	0.0386 mL	0.1928 mL	0.3856 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Neymotin A, et al. Neuroprotective effect of Nrf2/ARE activators, CDDO ethylamide and CDDO trifluoroethylamide, in a mouse model of amyotrophic lateral sclerosis. Free Radic Biol Med. 2011 Jul 1;51(1):88-96.
Liby K, et al. The synthetic triterpenoids CDDO-methyl ester and CDDO-ethyl amide prevent lung cancer induced by vinyl carbamate in A/J mice. Cancer Res. 2007 Mar 15;67(6):2414-9.