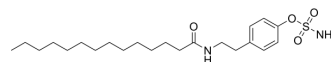


DU-14

Cat. No.:	HY-116377
CAS No.:	186303-55-9
Molecular Formula:	C ₂₂ H ₃₈ N ₂ O ₄ S
Molecular Weight:	426.61
Target:	Steroid Sulfatase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	DU-14 is a potent steroid sulfatase inhibitor with an IC ₅₀ of 55.8 nM. DU-14 inhibits the MCF-7 cell proliferation (IC ₅₀ = 38.7 nM). DU-14 has neuroprotective effects against neurotoxic A β , suggesting that up-regulation of endogenous DHEAS by DU-14 could be beneficial to the alleviation of A β -induced impairments in spatial memory and synaptic plasticity ^{[1][2][3]} .
In Vitro	DU-14 (0.001-10 μ M, 18 h) inhibits estrone sulfatase activity in MDA-MB-231 cell, with an IC ₅₀ of 350 nM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	DU-14 (30 mg/kg, i.p., once time) inhibits steroid sulfatase activity in both brain and liver tissues and enhances the memory-enhancing properties of DHEAS in rats with scopolamine-induced amnesia ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Selcer KW, et al. Inhibition of estrone sulfatase and proliferation of human breast cancer cells by nonsteroidal (p-O-sulfamoyl)-N-alkanoyl tyramines. *Cancer Res.* 1997 Feb 15;57(4):702-7.
- [2]. Li PK, et al. Memory enhancement mediated by the steroid sulfatase inhibitor (p-O-sulfamoyl)-N-tetradecanoyl tyramine. *Life Sci.* 1997;60(3):PL45-51.
- [3]. Yue XH, et al. Steroid sulfatase inhibitor DU-14 protects spatial memory and synaptic plasticity from disruption by amyloid β protein in male rats. *Horm Behav.* 2016 Jul;83:83-92.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

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