

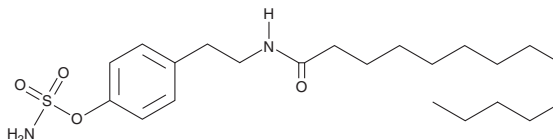
# PRODUCT INFORMATION



## DU-14

Item No. 39665

**CAS Registry No.:** 186303-55-9  
**Formal Name:** N-[2-[4-[(aminosulfonyl)oxy]phenyl]ethyl]-tetradecanamide  
**Synonym:** (*p*-O-Sulfamoyl)-N-Tetradecanoyltyramine  
**MF:** C<sub>22</sub>H<sub>38</sub>N<sub>2</sub>O<sub>4</sub>S  
**FW:** 426.6  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥3 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

DU-14 is supplied as a solid. A stock solution may be made by dissolving the DU-14 in the solvent of choice, which should be purged with an inert gas. DU-14 is soluble in organic solvents such as DMSO. DU-14 is slightly soluble in methanol and chloroform.

DU-14 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

DU-14 is a steroid sulfatase inhibitor (IC<sub>50</sub> = 55.8 nM).<sup>1</sup> It inhibits the proliferation of MCF-7 breast cancer cells (IC<sub>50</sub> = 38.7 nM).<sup>2</sup> *In vivo*, DU-14 (30 mg/kg), in combination with the steroid precursor dehydroepiandrosterone sulfate (DHEAS; Item No. 15873), potentiates DHEAS reversal of scopolamine-induced amnesia in the passive avoidance test in rats.<sup>1</sup> It also prevents scopolamine-induced amnesia in the passive avoidance test in rats when administered at a dose of 30 mg/kg per day.<sup>3</sup>

### References

1. Li, P.K., Rhodes, M.E., Burke, A.M., *et al.* Memory enhancement mediated by the steroid sulfatase inhibitor (*p*-O-sulfamoyl)-N-tetradecanoyl tyramine. *Life Sci.* **60**(3), 45-51 (1997).
2. Selcer, K.W., Hegde, P.V., and Li, P.K. Inhibition of estrone sulfatase and proliferation of human breast cancer cells by nonsteroidal (*p*-O-sulfamoyl)-N-alkanoyl tyramines. *Cancer Res.* **57**(4), 702-707 (1997).
3. Rhodes, M.E., Li, P.K., Burke, A.M., *et al.* Enhanced plasma DHEAS, brain acetylcholine and memory mediated by steroid sulfatase inhibition. *Brain Res.* **773**(1-2), 28-32 (1997).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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