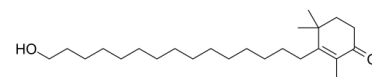


## Data Sheet

<b>Product Name:</b>	tCFA15
<b>Cat. No.:</b>	CS-0025935
<b>CAS No.:</b>	220757-88-0
<b>Molecular Formula:</b>	C <sub>24</sub> H <sub>44</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	364.60
<b>Target:</b>	Notch
<b>Pathway:</b>	Neuronal Signaling; Stem Cell/Wnt
<b>Solubility:</b>	DMSO : 130 mg/mL (356.56 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

tCFA15 is a trimethyl cyclohexenonic long chain fatty alcohol containing 15 carbon atoms on the side chain, promotes the differentiation of neurons, and may regulate **Notch** signaling. IC<sub>50</sub> & Target: Notch1<sup>[1]</sup> **In Vitro:** tCFA15 (10 nM-1 μM) dose-dependently affects the differentiation of neural stem cell-derived neurospheres by promoting neurons at the expense of astrocytes, and such effect is via Notch1. tCFA15 (1 μM) specifically decreases the level of Notch1 mRNA in spheres, and such an effect is also observed in decreases Notch1 expression in neuronal and glial cell cultures<sup>[1]</sup>. tCFA15 stimulates arginine vasopressin secretion in nerve terminals of the neurohypophysis<sup>[2]</sup>.

### References:

- [1]. Bouissac J, et al. tCFA15, a trimethyl cyclohexenonic long-chain fatty alcohol, affects neural stem fate and differentiation by modulating Notch1 activity. *Eur J Pharmacol.* 2013 Oct 15;718(1-3):383-92.
- [2]. Girlanda-Junges C, et al. 3-(15-Hydroxypentadecyl)-2,4,4-trimethyl-2-cyclohexen-1-one and its effect on neuropeptide secretion. *Bioorg Med Chem Lett.* 2000 Nov 20;10(22):2537-9.

### CAIndexNames:

2-Cyclohexen-1-one, 3-(15-hydroxypentadecyl)-2,4,4-trimethyl-

### SMILES:

O=C1C(C)=C(CCCCCCCCCCCCCCO)C(C)(C)CC1

**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