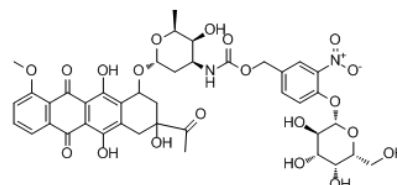


**Product Name** : Daun02  
**Cat. No.** : PC-43365  
**CAS No.** : 290304-24-4  
**Molecular Formula** : C<sub>41</sub>H<sub>44</sub>N<sub>2</sub>O<sub>20</sub>  
**Molecular Weight** : 884.7895  
**Target** : ADC Cytotoxin  
**Solubility** : 10 mM in DMSO



## Biological Activity

Daun02 is a prodrug that is converted by  $\beta$ -galactosidase to Daunorubicin and **topoisomerase** inhibitor, specifically attenuates cocaine-induced locomotor activity, also attenuates cocaine-induced  $\beta$ -galactosidase expression.

Daunorubicin, the active product of Daun02 metabolism by  $\beta$ -galactosidase, decreases the activity of MSNs in rat brain slices and that Daun02 strongly decreases the excitability of rat MSN primary cultures expressing  $\beta$ -galactosidase upon D1 dopamine receptor stimulation.

Daun02 selectively inactivate only those neurons activated by cocaine in an environment repeatedly paired with drug injections.

## References

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Farquhar D, et al. Cancer Chemother Pharmacol. 2002 Jul;50(1):65-70.  
Koya E, et al. Curr Protoc Neurosci. 2016 Jul 1;76:8.36.1-8.36.17.  
Cruz FC, et al. J Neurosci. 2014 May 28;34(22):7437-46.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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