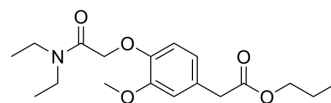


Propanidid

Cat. No.:	HY-116457
CAS No.:	1421-14-3
Molecular Formula:	C ₁₈ H ₂₇ NO ₅
Molecular Weight:	337.41
Target:	GABA Receptor
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Propanidid (Sombrevin; Fabantol) is a γ -aminobutyric acid type A (GABA _A) receptor agonist and a short-acting non-barbiturate general anesthetic agent. Propanidid can decrease the arterial pressure ^{[1][2]} .									
IC₅₀ & Target	GABA _A receptor ^[1]									
In Vivo	<p>Propanidid (Sombrevin) (3-5 mg/kg; injected into the femoral vein; single dosage) changes the orientation tuning of 58 visual cortex neurons^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Adult cats (immobilized by D-tubocurarine)^[3]</td> </tr> <tr> <td>Dosage:</td> <td>3-5 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Injected into the femoral vein; single dosage</td> </tr> <tr> <td>Result:</td> <td> <p>A reliable change of the preferable orientation by 47.6 ± 5.6 degrees took place in 60% of 58 primary visual cortex neurons, while in the remaining cells it was stable in all stages of anaesthesia.</p> <p>The width of the orientation tuning changed reliably by 65.2 ± 6.7 degrees on the average in 55% of neurons, while in 31% of neurons the tuning acuteness was worse, but in 24% it was sharper.</p> <p>The preferable orientation, the width of the tuning and the frequency of the neuron discharge as a rule recovered in 30 min after the beginning of the anaesthesia.</p> </td> </tr> </table>		Animal Model:	Adult cats (immobilized by D-tubocurarine) ^[3]	Dosage:	3-5 mg/kg	Administration:	Injected into the femoral vein; single dosage	Result:	<p>A reliable change of the preferable orientation by 47.6 ± 5.6 degrees took place in 60% of 58 primary visual cortex neurons, while in the remaining cells it was stable in all stages of anaesthesia.</p> <p>The width of the orientation tuning changed reliably by 65.2 ± 6.7 degrees on the average in 55% of neurons, while in 31% of neurons the tuning acuteness was worse, but in 24% it was sharper.</p> <p>The preferable orientation, the width of the tuning and the frequency of the neuron discharge as a rule recovered in 30 min after the beginning of the anaesthesia.</p>
Animal Model:	Adult cats (immobilized by D-tubocurarine) ^[3]									
Dosage:	3-5 mg/kg									
Administration:	Injected into the femoral vein; single dosage									
Result:	<p>A reliable change of the preferable orientation by 47.6 ± 5.6 degrees took place in 60% of 58 primary visual cortex neurons, while in the remaining cells it was stable in all stages of anaesthesia.</p> <p>The width of the orientation tuning changed reliably by 65.2 ± 6.7 degrees on the average in 55% of neurons, while in 31% of neurons the tuning acuteness was worse, but in 24% it was sharper.</p> <p>The preferable orientation, the width of the tuning and the frequency of the neuron discharge as a rule recovered in 30 min after the beginning of the anaesthesia.</p>									

REFERENCES

- [1]. Cenani A, et al. In vitro and in vivo GABA_A Receptor Interaction of the Propanidid Metabolite 4-(2-[Diethylamino]-2-Oxoethoxy)-3-Methoxy-Benzeneacetic Acid. *Pharmacology*. 2019;103(1-2):10-16.
- [2]. Orko R. Anaesthesia for cardioversion: a comparison of diazepam, thiopentone and propanidid. *Br J Anaesth*. 1976 Mar;48(3):257-62.
- [3]. Lazareva NA, et al. The effect of sombrevin on the orientation adjustment of the visual cortex neurons in the cat. *Neirofiziologija*. 1989;21(6):812-20.

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