

Product data sheet



MedKoo Cat#: 535292 Name: Beclamide CAS#: 501-68-8 Chemical Formula: C ₁₀ H ₁₂ ClNO Exact Mass: 197.0607 Molecular Weight: 197.66	 <chem>ClCCC(=O)NCc1ccccc1</chem>
Product supplied as: Powder	
Purity (by HPLC): ≥ 98%	
Shipping conditions: Ambient temperature	
Storage conditions: Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Beclamide is a drug that possesses anticonvulsant activity. It is no longer used. Beclamide is possibly metabolized to 3-chloropropanoic acid in vivo, which binds to the GHB receptor. It has been used as a sedative and as an anticonvulsant. It was studied in the 1950s for its anticonvulsant properties, as a treatment for generalised tonic-clonic seizures. It was not effective for absence seizures. Interest in the drug resumed in the 1990s for its psychiatric properties as an adjunct in the treatment of schizophrenia.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	70.0	354.14
Ethanol	40.0	202.37

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	5.06 mL	25.30 mL	50.59 mL
5 mM	1.01 mL	5.06 mL	10.12 mL
10 mM	0.51 mL	2.53 mL	5.06 mL
50 mM	0.10 mL	0.51 mL	1.01 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

1. Darmani NA, Sewell RD, Nicholls PJ. Effects of beclamide on isolation-induced aggression and locomotor activity in mice. *J Pharm Pharmacol.* 1988 Dec;40(12):891-3. doi: 10.1111/j.2042-7158.1988.tb06297.x. PMID: 2907587.

7. Bioactivity

Biological target: Beclamide is a drug that possesses anticonvulsant activity.

In vitro activity

TBD

In vivo activity

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The anti-aggressive effects of orally administered beclamide (N-Benzyl-beta-chloropropionamide) were studied in male albino mice which were individually isolated for a 28-day period. Beclamide (50-250 mg kg⁻¹ p.o.) caused an overall dose-dependent increase in the attack onset latency, a reduction in the percentage of animals attacking and the mean number of attacks/animal for this model of aggression. In addition, the highest dose of beclamide (250 mg kg⁻¹ p.o.) did not significantly modify locomotor activity in mice. It was concluded that beclamide induced anti-aggressive effects at non-sedative doses. This anti-aggressive action was thought to be at least partially mediated, through a beclamide-induced release of 5-HT from presynaptic sites.

Reference: J Pharm Pharmacol. 1988 Dec;40(12):891-3. <https://academic.oup.com/jpp/article-abstract/40/12/891/6176493?redirectedFrom=fulltext>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.