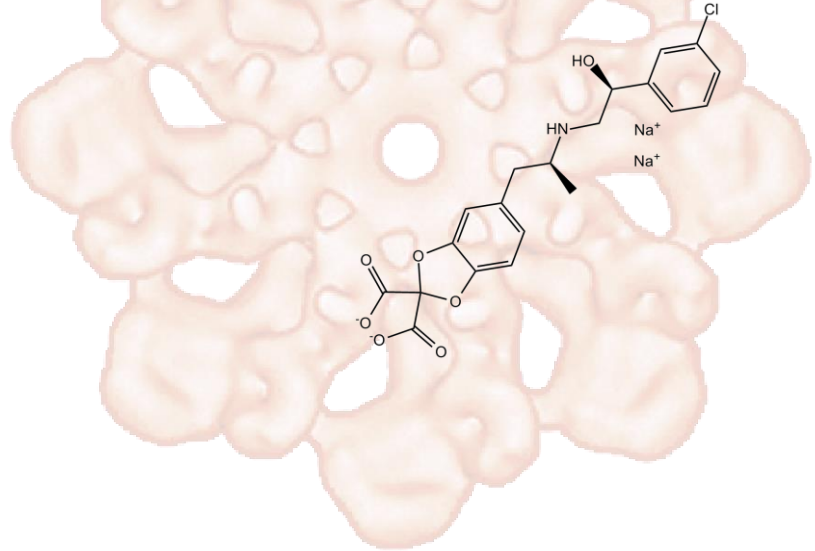


CL 316243 disodium salt

Cat. No.:	B6766
CAS No.:	151126-84-0
Formula:	C ₂₀ H ₁₈ ClNNa ₂ O ₇
M.Wt:	465.8
Synonyms:	
Target:	GPCR/G protein
Pathway:	Adrenergic Receptor
Storage:	Desiccate at -20°C



Solvent & Solubility

<46.58mg/ml in H₂O

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
	1 mM		2.1468 mL	10.7342 mL	21.4684 mL
	5 mM		0.4294 mL	2.1468 mL	4.2937 mL
	10 mM		0.2147 mL	1.0734 mL	2.1468 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

murine-selective β 3 adrenoceptor agonist

IC₅₀ & Target

Cell Viability Assay

In Vitro

Preparation method:

The solubility of this compound in sterile water is 100 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.

Reacting conditions:

0.01 ~ 300 μ M

Applications:

CL 316243 concentration-dependently decreased the basal tension of the LES smooth muscle, with an EC_{max} value of 1 × 10⁻⁴ M. At corresponding EC_{max}

	values, the smooth muscle relaxation induced by CL 316243 was significantly longer than that triggered by isoproterenol. The smooth muscle relaxation in the isoproterenol group began to recover within 5 mins but it cost 1 hr in the case of CL 316243.	
In Vivo	Animal experiment	
	Animal models:	Nonobese and nondiabetic Sprague-Dawley rats
	Dosage form:	1 mg/kg/day; s.c.; for 10 ~ 12 days
	Applications:	After 7 days of treatment, CL 316243 significantly increased food consumption, resting metabolic rates, as well as body core temperatures in rats. Besides, CL 316243 decreased the respiratory quotient by 14%. On day 11, an oral glucose load (2 g/kg) did not alter plasma glucose and insulin excursions. In addition, CL 316243 reduced abdominal and epididymal white fat pad weights, but doubled interscapular brown adipose tissue weight at the same time.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

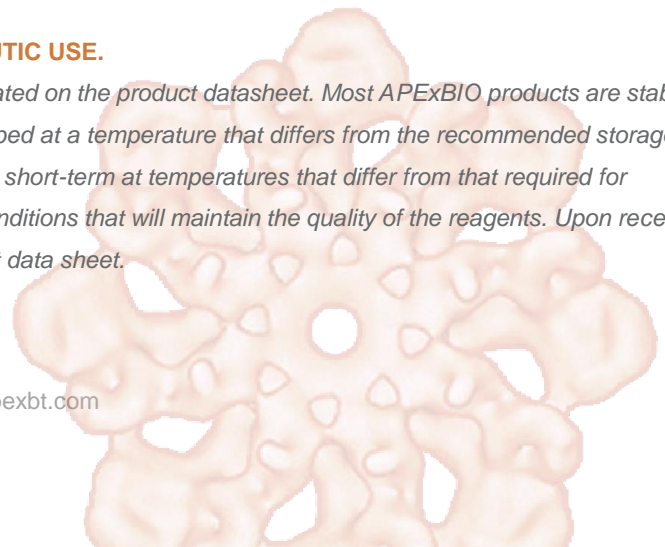
- [1]. Sarma DN, Banwait K, Basak A, DiMarino AJ, Rattan S. Inhibitory effect of beta3-adrenoceptor agonist in lower esophageal sphincter smooth muscle: in vitro studies. J Pharmacol Exp Ther. 2003 Jan;304(1):48-55.
- [2]. de Souza CJ, Hirshman MF, Horton ES. CL-316,243, a beta3-specific adrenoceptor agonist, enhances insulin-stimulated glucose disposal in nonobese rats. Diabetes. 1997 Aug;46(8):1257-63.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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