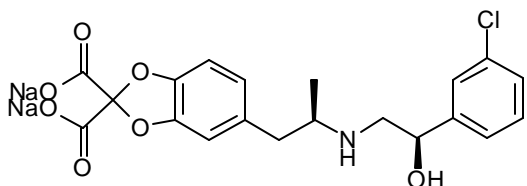


## Product Information

**CL 316243**Product Number **C5976**

Storage Temperature: Room Temperature

**Product Description**Molecular Formula: C<sub>20</sub>H<sub>18</sub>NO<sub>7</sub>ClNa<sub>2</sub>

Molecular Weight: 465.80 (anhydrous)

$\beta$ -Adrenoceptors are classified into 3 subclasses:  $\beta_1$ ,  $\beta_2$ ,<sup>1</sup> and  $\beta_3$ .<sup>2</sup>  $\beta_1$ -receptor stimulation results in increased heart rate, while bronchodilation and smooth muscle relaxation are attributed to  $\beta_2$ -receptor stimulation.  $\beta_3$ -receptors are expressed on the surface of both brown and white adipocytes. Their stimulation promotes breakdown of fat (lipolysis) and energy expenditure.

CL 316243 is an extremely poor  $\beta_1$  and  $\beta_2$  agonist, making it the most selective  $\beta_3$  agonist identified. It is a potent stimulator of lipolysis. It also activates  $\beta_3$ -adrenoceptors on neurons in hypothalamic areas that are important in the central regulation of appetite.<sup>3</sup>

**Preparation Instructions**

Soluble in water, greater than 10 mg/ml.

**Storage/Stability**

Store at room temperature.

**References**

1. Lands, A.M. et al., Nature, **214**, 597 (1967).
2. Arch, J.R.S., Proc. Nutrition Soc., **48**, 215 (1989).
3. Castillo-Melendez, M. et al., Neurosci. Lett., 290(3), 161 (2000).

mje 7/00

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.