

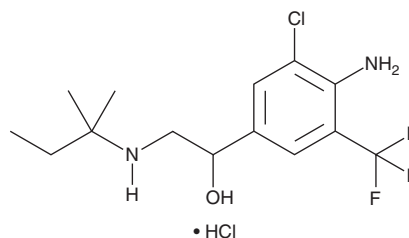
# PRODUCT INFORMATION



## Mapenterol (hydrochloride)

Item No. 34562

**CAS Registry No.:** 54238-51-6  
**Formal Name:** 4-amino-3-chloro- $\alpha$ -[[[(1,1-dimethylpropyl)amino]methyl]-5-(trifluoromethyl)-benzenemethanol, monohydrochloride  
**MF:** C<sub>14</sub>H<sub>20</sub>ClF<sub>3</sub>N<sub>2</sub>O • HCl  
**FW:** 361.2  
**Purity:**  $\geq$ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Mapenterol (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the mapenterol (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Mapenterol (hydrochloride) is slightly soluble in methanol and DMSO.

Mapenterol (hydrochloride) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Mapenterol is an agonist of  $\beta_2$ -adrenergic receptors ( $\beta_2$ -ARs).<sup>1</sup> It has been used as a standard for the simultaneous detection of multiple drug residues in commercial livestock synovial fluids by GC-MS.<sup>2</sup> It has been used as an illicit feed additive to promote growth in livestock.<sup>1</sup>

### References

1. Boyd, S., Heskamp, H.H., Bovee, T.F.H., *et al.* Development, validation and implementation of a receptor based bioassay capable of detecting a broad range of beta-agonist drugs in animal feedings. *Anal. Chim. Acta* **637(1-2)**, 24-32 (2009).
2. Brambilla, G., Civitareale, C., Pierdominici, E., *et al.* Synovial fluid as a matrix of selection in the detection of beta-adrenergic agonist drugs in carcasses and fresh meat. *Analyst* **119(12)**, 2591-2593 (1994).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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