

# PRODUCT INFORMATION



## Mirabegron Impurity 6

Item No. 36315

CAS Registry No.: 391901-45-4

Formal Name:  $\alpha$ R-[[[2-(4-aminophenyl)ethyl]amino]methyl]-benzenemethanol

Synonym: (R)-2-((4-Aminophenethyl)amino)-1-phenylethanol

MF:  $C_{16}H_{20}N_2O$

FW: 256.3

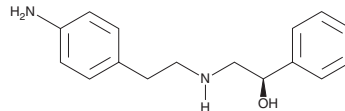
Purity:  $\geq 95\%$

UV/Vis.:  $\lambda_{max}$ : 240 nm

Supplied as: A solid

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

Mirabegron impurity 6 is supplied as a solid. A stock solution may be made by dissolving the mirabegron impurity 6 in the solvent of choice, which should be purged with an inert gas. Mirabegron impurity 6 is soluble in the organic solvent DMSO at a concentration of approximately 2 mg/ml.

### Description

Mirabegron impurity 6 is a metabolite of the  $\beta_3$ -adrenergic receptor agonist mirabegron (Item No. 17319).<sup>1</sup> It is formed via hydrolysis of mirabegron by butyrylcholinesterase (BChE). Mirabegron impurity 6 is also an intermediate in the synthesis of mirabegron.<sup>2</sup>

### References

1. Takusagawa, S., Yajima, K., Miyashita, A., *et al.* Identification of human cytochrome P450 isoforms and esterases involved in the metabolism of mirabegron, a potent and selective  $\beta_3$ -adrenoceptor agonist. *Xenobiotica* **42(10)**, 957-967 (2012).
2. Xu, G., Mao, S.H., Mao, L., *et al.* Study on a new method for synthesis of mirabegron. *J. Heterocyclic Chem.* **54(5)**, 2703-2707 (2017).

#### 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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