

**Catalog # 10-4371**

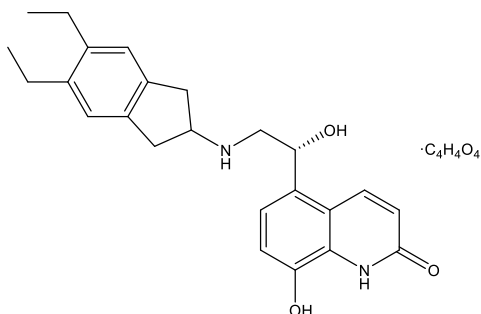
**Indacaterol maleate**

CAS# 753498-25-8

5-[(1*R*)-2-[(5,6-Diethyl-2,3-dihydro-1*H*-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-1*H*-quinolin-2-one maleate salt;

QAB149

Lot # FBA10068



Indacaterol maleate is a full agonist ( $pEC_{50} = 8.06$ ) of the human  $\beta_2$  adrenoceptor.<sup>1,2</sup> Clinically important drug for the treatment of chronic obstructive pulmonary disease. Indacaterol blocked colorectal cancer progression *in vitro* ( $IC_{50} = 19.01 \mu M$ ) and *in vivo* via inhibition of the splicing factor SRSF6 by binding to its RRM2 domain.<sup>3</sup> It also blocked cell migration in metastatic breast cancer MDA-MB-231 cells by a similar mechanism.<sup>4</sup>

- 1) Battram *et al.* (2006), *In vitro and in vivo pharmacological characterization of 5-[(R)-2-(5,6-diethyl-indan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-1H-quinolin-2-one (indacaterol), a novel inhaled  $\beta_2$  adrenoceptor agonist with a 24-h duration of action*; J. Pharmacol. Exp. Ther. **317** 762
- 2) Sturton *et al.* (2008), *Pharmacological characterization of indacaterol, a novel once daily inhaled  $\beta_2$  adrenoceptor agonist on small airways in human and rat precision-cut lung slices*; J. Pharmacol. Exp. Ther. **324** 270
- 3) Wan *et al.* (2017), *SRSF6-regulated alternative splicing that promotes tumour progression offers a therapy target for colorectal cancer*; Gut **68** 118
- 4) Ayama-Canden *et al.* (2023), *Indacaterol inhibits collective cell migration and IGDQ-mediated single cell migration in metastatic breast cancer MDA-MB-231 cells*; Cell Commun. Signal. **21** 301

**PHYSICAL DATA**

Molecular Weight:	508.57
Molecular Formula:	$C_{24}H_{28}N_2O_3 \cdot C_4H_4O_4$
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White to off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**