

# Formoterol (Fumarate)

Catalog No: tcsc1326



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

43229-80-7

**Formula:**

$C_{19}H_{24}N_2O_4 \cdot \frac{1}{2}C_4H_4O_4$

**Pathway:**

GPCR/G Protein

**Target:**

Adrenergic Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

Formoterol

**Observed Molecular Weight:**

402.44

## Product Description

Formoterol fumarate(Foradil) is a potent, selective and long-acting  $\beta$ 2-adrenoceptor agonist.

IC50 Value: 2.1 nM in pregnant C3H/HeN strain mice[5]

Target:  $\beta$ 2 receptor

Budesonide/formoterol in a single inhaler for both maintenance and reliever therapy is now an established therapeutic option for management of inadequately controlled asthma[4].

in vitro: The long-acting  $\beta$ (2)-agonist formoterol and the glucocorticoid dexamethasone significantly reduced HRV-induced ERK phosphorylation, Fra-1, and MMP-9 expression in BEAS-2B cells[3].

in vivo: compared the bronchodilatory effects of inhaled budesonide/formoterol (dose: 200  $\mu$ g and 12  $\mu$ g respectively) combination with budesonide (200  $\mu$ g)/salbutamol (200  $\mu$ g) administered by metered dose inhaler and spacer in children of 5-15 years with mild acute exacerbation of asthma [Modified Pulmonary Index Score (MPIS) between 6-8] in this double-blind, randomized controlled trial. The primary outcome was FEV1 (% predicted) in the two groups at 1, 5, 15, 30, 60 min after administration of the study drug[1]. Fifteen randomized, placebo-controlled clinical trials including COPD patients were evaluated: indacaterol 75  $\mu$ g once daily (n = 2 studies), indacaterol 150  $\mu$ g once daily (n = 5), indacaterol 300  $\mu$ g once daily (n = 4), FOR/BUD 9/160  $\mu$ g twice daily (n = 2), FOR/BUD 9/320  $\mu$ g twice daily (n = 2), SAL/FP 50/500  $\mu$ g twice daily (n = 4), and SAL/FP 50/250  $\mu$ g twice daily (n = 1)[2].

Clinical trial: Effects of Mometasone Furoate/Formoterol Combination Versus Mometasone Furoate Alone in Persistent Asthmatics (Study P04073) . Phase3

