

# Formoterol

Catalog No: tcsc1413



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

67346-49-0

**Formula:**

$C_{19}H_{24}N_2O_4$

**Pathway:**

GPCR/G Protein

**Target:**

Adrenergic Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

(-)-Formoterol;Arformoterol;(R,R)-Formoterol

**Observed Molecular Weight:**

344.4

## Product Description

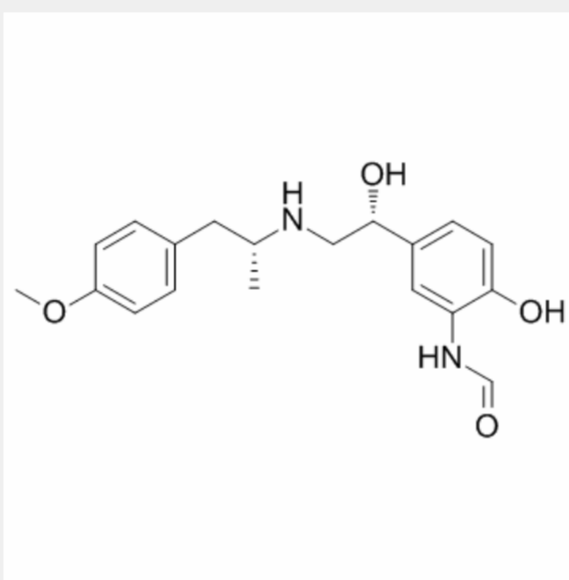
Formoterol(Arformoterol) is a novel highly  $\beta$ 2-selective adrenergic agonist and holds promise as a  $\beta$ 2-agonist that could impart selective beneficial metabolic effects.

IC50 Value:

Target:  $\beta$ 2-selective adrenergic agonist

in vitro: Formoterol restored Dex sensitivity by inhibiting phosphorylation of GR-Ser226 and JNK1[1]. Formoterol (FM), but not SM, partially inhibited H(2) O(2) -induced PI3K $\delta$ -dependent (PKB) phosphorylation. H(2) O(2) decreased SM-induced cAMP production in U937 cells, but did not significantly affect the response to FM [3].

in vivo: Mice exposed to formoterol for 24 or 72 h exhibited increases in kidney and heart mtDNA copy number, peroxisome proliferator-activated receptor  $\gamma$  coactivator 1 $\alpha$ , and multiple genes involved in the mitochondrial electron transport chain (F0 subunit 6 of transmembrane F-type ATP synthase, NADH dehydrogenase subunit 1, NADH dehydrogenase subunit 6, and NADH dehydrogenase [ubiquinone] 1 $\beta$  subcomplex subunit 8) [2]. Formoterol and ritodrine inhibited the amplitude and frequency of rat uterine contraction, with IC50 values of  $3.8 \times 10^{-10}$  and  $4.7 \times 10^{-7}$  M, respectively [4].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!