



Formoterol

Catalog No: tcsc1413

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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; (R,R)-Formoterol

Observed Molecular Weight:

344.4

Product Description

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





IC50 Value:

Target: β2-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 PI3Kδ-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 γ coactivator 1α , 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] 1β subcomplex subunit 8) [2]. Formoterol and ritodrine inhibited the amplitude and frequency of rat uterine contraction, with IC50 values of 3.8 x 10(-10) and 4.7 x 10(-7) M, respectively [4].

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