Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Zileuton

Catalog No: tcsc1563

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
111406-87-2

Formula:
$C_{11}H_{12}N_2O_2S$

Pathway:
Metabolic Enzyme/Protease

Target:
5-Lipoxygenase

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (423.21 mM)

Alternative Names:
A 64077;Abbott 64077

Observed Molecular Weight:
236.29

Product Description

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Zileuton is a potent and selective inhibitor of **5-lipoxygenase**, exhibiting inflammatory activities.

In Vitro: In anti-CD3-treated cells, IL-2 decreases in zileuton-treated and untreated cells with increasing incubation time. Zileuton likely reduces IL-2 levels by inhibiting 5-lipoxygenase, hence leukotriene B4 production, an IL-2 inducer[2].

In Vivo: In zileuton (5 mg/kg, p.o.) treated I/R rat, the effect of zileuton to decrease NF-κB expression does not change significantly in the presence of COX inhibitors, and the group reveals significantly lower level of NF-κB staining. Zileuton (5 mg/kg, p.o.) treatment given to I/R rats decreases apoptotic index significantly. Zileuton has no significant effect on increased serum TNF-α levels in I/R group[1]. Zileuton (1,200 mg/kg) inhibits the polyp formation in $APC^{\Delta 468}$ colon and small intestine. Zileuton treatment inhibits the proliferation rates of non epithelial cells in polyps, and increases the apoptosis rates in polyps in rat. There is significant increase in the number of apoptotic cells in the Zileuton-treated cells both in small intestine and in the colon. The reduced proliferation rate may significantly contribute to the reduction of polyposis in both the small intestine and colon of Zileuton-fed $APC^{\Delta 468}$ mice[3].