

# Zileuton, 5-Lipoxygenase inhibitor

Catalog	Unit
TBI1098 - 10MG	10 mg
TBI1098 - 50MG	50 mg

## **Product Details**

Formal Name: N-(1-Benzo[b]thien-2-ylethyl)-N-hydroxyurea

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

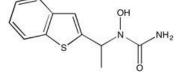
**Formula Weight:** 236.29 **CAS Number:** 111406-87-2

**Purity:** >98%

Formulation: Powder

**Solubility:** Soluble in DMSO (up to 25 mg/ml).

**Storage:**  $-20^{\circ}$ C **Stability:**  $\geq 2$  years.



#### **Applications**

5-Lipoxygenase inhibitor

## **Functions**

Zileuton (111406-87-2) is a reversible inhibitor (IC $_{50}$  = 500nM RBL-1 cells, 300nM rat PMNL cells) of 5-Lipoxygenase (5-LO). It also inhibited leukotriene B<sub>4</sub> biosynthesis (IC $_{50}$ 's = 400nM rat PMNL, 400nM human PMNL and 900nM human whole blood). Zileuton suppressed prostaglandin biosynthesis via interference with arachidonic acid release in macrophages independent of 5-LO inhibition (IC $_{50}$  = 13  $\mu$ M PGE2 inhibition in LPS-stimulated whole blood). Zileuton was approved by the FDA in 1997 for the treatment of asthma (ZYFLO).

# **Application Procedures**

First dissolved in DMSO (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

### **Relative Products**

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabline
TBI2058	Aphidicolin, DNA polymerase Inhibitor

### For research use only.