

## 5-LOX-IN-8

## Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.

## Biological Description

Description	5-LOX-IN-8 is a 5-LOX inhibitor with anti-inflammatory properties. It suppresses IL-6, IL-1 $\beta$ , TNF- $\alpha$ , and IFN- $\gamma$ in macrophages and reduces IL-8 secretion in SW480 cells. Additionally, 5-LOX-IN-8 decreases the disease activity index in DSS colitis models. This compound is applicable for research in inflammatory bowel disease (IBD).
Targets(IC50)	IFNAR,Interleukin,Lipoxygenase,TNF
In vitro	5-LOX-IN-8 (Compound 18d) demonstrates cytotoxic effects on THP-1 cells (IC 50: 37.65 $\mu$ M) and SW 480 cells (IC 50: 14.37 $\mu$ M) at concentrations ranging from 0.3 to 50 $\mu$ M over 24 hours. At 10 $\mu$ M for 5 minutes, it inhibits human recombinant 5-LOX by 40.65% and reduces NO production in SW480 cells by 38.85%. When pre-treated at 10 $\mu$ M for 1 hour followed by co-culture with LPS for 24 hours, 5-LOX-IN-8 suppresses the LPS-induced production of IL-6 (93.98%), IL-1 $\beta$ (19.41%), TNF- $\alpha$ (45.97%), and IFN- $\gamma$ (66.61%) in THP-1 macrophages.
In vivo	5-LOX-IN-8 (Compound 18d) at a dosage of 30 mg/kg reduces disease activity in a 5% DSS-induced mouse colitis model.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286

E\_mail:info@targetmol.com

Address:34 Washington Street,Wellesley Hills,MA 02481