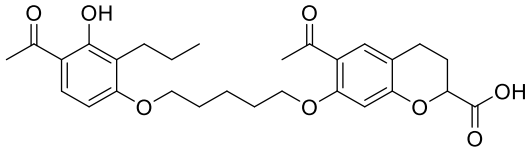


Product data sheet



MedKoo Cat#: 571381 Name: Ablukast CAS#: 96566-25-5 (free acid) Chemical Formula: C ₂₈ H ₃₄ O ₈ Exact Mass: 498.2254 Molecular Weight: 498.57	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

Ablukast is a leukotriene receptor antagonist that acts as an anti-asthmatic.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	100.0	200.58

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.01 mL	10.03 mL	20.06 mL
5 mM	0.40 mL	2.01 mL	4.01 mL
10 mM	0.20 mL	1.00 mL	2.01 mL
50 mM	0.04 mL	0.20 mL	0.40 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

- Rosenbach T, Csatò M, Czarnetzki BM. Studies on the role of leukotrienes in murine allergic and irritant contact dermatitis. *Br J Dermatol.* 1988 Jan;118(1):1-6. doi: 10.1111/j.1365-2133.1988.tb01743.x. PMID: 2829957.
- Sun J, Herman CA. Cardiovascular effects of N-methyl leukotriene C₄, a nonmetabolizable leukotriene C₄ analogue, and the antagonism of leukotriene-induced hypotension by Ro 23-3544, in the American bullfrog, *Rana catesbeiana*. *Can J Physiol Pharmacol.* 1995 Mar;73(3):383-9. doi: 10.1139/y95-049. PMID: 7648518.

7. Bioactivity

Biological target:

Ablukast (Ro 23-3544) is a specific and active leukotriene receptor antagonist that effectively reduces LTC₄- and antigen-induced bronchoconstriction.

In vitro activity

TBD

Product data sheet



In vivo activity

In this study, the dose-response curves of N-methyl LTC₄ (NMLTC₄), the nonmetabolizable LTC₄ analogue, and the peptidoleukotrienes (LTC₄, LTD₄, and LTE₄) were obtained in the absence and presence of the leukotriene antagonist Ro 23-3544 in cannulated frogs. The NMLTC₄- and LTC₄-induced hypotensive effects were antagonized by Ro 23-3544. Ro 23-3544 also antagonized the effects induced by high doses of LTD₄ and LTE₄. Ro 23-3544 had no effect on duration of response and did not affect heart rate responses to LTC₄ at low dose of the antagonist. The data suggest that receptors that preferentially bind LTC₄ in bullfrog vascular smooth muscle regulate the hypotensive effect and that they can be antagonized by Ro 23-3544.

Reference: Can J Physiol Pharmacol. 1995 Mar;73(3):383-9. <https://pubmed.ncbi.nlm.nih.gov/7648518/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.