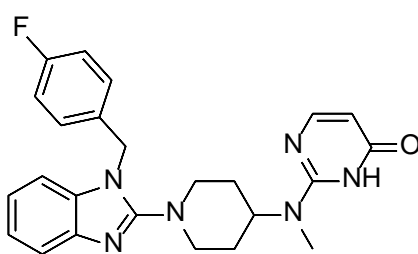


# Product data sheet



MedKoo Cat#: 584735 Name: Mizolastine CAS: 108612-45-9 Chemical Formula: C <sub>24</sub> H <sub>25</sub> FN <sub>6</sub> O Exact Mass: 432.2074 Molecular Weight: 432.5034		
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:

Mizolastine is a selective histamine H1 receptor antagonist.

## 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	25.0	57.80
Chloroform	10.0	23.12
Water	1.0	2.31

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.31 mL	11.56 mL	23.12 mL
5 mM	0.46 mL	2.31 mL	4.62 mL
10 mM	0.23 mL	1.16 mL	2.31 mL
50 mM	0.05 mL	0.23 mL	0.46 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

1. Yan Y, Wang B, Zuo YG, Qu T. Inhibitory effects of mizolastine on ultraviolet B-induced leukotriene B<sub>4</sub> production and 5-lipoxygenase expression in normal human dermal fibroblasts in vitro. *Photochem Photobiol.* 2006 May-Jun;82(3):665-9. doi: 10.1562/2005-08-17-RA-652. PMID: 16402861.

2. Xia Q, Yang S, Zhang SQ, Chen B, Wang DB, Zhu QX, Wang Y, Yan KL, He PP, Zhang XJ. The effect of mizolastine on expression of vascular endothelial cell growth factor, tumour necrosis factor-alpha and keratinocyte-derived chemokine in murine mast cells, compared with dexamethasone and loratadine. *Clin Exp Dermatol.* 2005 Mar;30(2):165-70. doi: 10.1111/j.1365-2230.2005.01721.x. PMID: 15725247.

### In vivo study

1. Ren X, Zhang M, Chen L, Zhang W, Huang Y, Luo H, Li L, He H. The anti-inflammatory effects of Yunnan Baiyao are involved in regulation of the phospholipase A<sub>2</sub>/arachidonic acid metabolites pathways in acute inflammation rat model. *Mol Med Rep.* 2017 Oct;16(4):4045-4053. doi: 10.3892/mmr.2017.7104. Epub 2017 Jul 27. PMID: 28765972; PMCID: PMC5647098.

2. Goldhill J, Pichat P, Roome N, Angel I, Arbilla S. Effect of mizolastine on visceral sensory afferent sensitivity and inflammation during experimental colitis. *Arzneimittelforschung.* 1998 Feb;48(2):179-84. PMID: 9541730.

# Product data sheet



## 7. Bioactivity

### Biological target:

Mizolastine is a histamine H1 receptor antagonist (second generation antihistamine).

### In vitro activity

This study investigated the influence of MIZ (mizolastine) on proangiogenesis factors, vascular endothelial cell growth factor (VEGF), tumour necrosis factor (TNF)-alpha and keratinocyte-derived chemokine (KC) in murine mast cells by using ELISA and RT-PCR, as compared with dexamethasone (DEX) and loratadine (LOR). These results show that MIZ is effective in the inhibition of KC, VEGF and TNF-alpha release induced by an IgE-dependent mechanism, in a time- and dose-dependent manner.

Reference: Clin Exp Dermatol. 2005 Mar;30(2):165-70. <https://pubmed.ncbi.nlm.nih.gov/15725247/>

### In vivo activity

In the current study, the capacity of YNB (Yunnan Baiyao) to ameliorate inflammation was compared in carrageenan-induced and AA-induced acute inflammation of the rat paw with celecoxib and mizolastine, respectively (n=24 per group). Celecoxib ameliorated carrageenan-induced paw edema, and mizolastine ameliorated AA-induced rat paw edema.

Reference: Mol Med Rep. 2017 Oct;16(4):4045-4053. <https://pubmed.ncbi.nlm.nih.gov/28765972/>

*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.*