

## **Product** Data Sheet

## **Niraxostat**

Cat. No.: HY-14669

CAS No.: 206884-98-2

Molecular Formula:  $C_{16}H_{17}N_3O_3$ Molecular Weight: 299.32

Target: Xanthine Oxidase

Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description

Niraxostat (Y-700; Piraxostat) is an orally active xanthine oxidoreductase (XOR) inhibitor used in the study of hyperuricemia and other diseases in which XOR may be involved<sup>[1]</sup>.

In Vivo

Niraxostat (Y-700; 1 mg/kg) has high oral bioavailability (84.1%) and is almost not excreted through the kidneys. It is mainly eliminated through the liver<sup>[1]</sup>.

Niraxostat (Y-700; 1-10 mg/kg; oral; single dose) dose-dependently reduces plasma urate levels in oxonate-treated rats  $^{[1]}$ . Niraxostat (Y-700; 0.3-3 mg/kg; Oral; Single dose) In normal rats, dose-dependently reduces urinary excretion of urate and allantoin while increasing excretion of hypoxanthine and xanthine  $^{[1]}$ .

Pharmacokinetic Analysis of Niraxostat (Y-700) in normal rats<sup>[1]</sup>

| Route | Dose (mg/kg) | t <sub>max</sub> (h) | C <sub>max</sub> (μg/ml) | $AUC_{0-\infty}$ (µg/h/ml) | t <sub>1/2</sub> (h) |
|-------|--------------|----------------------|--------------------------|----------------------------|----------------------|
| РО    | 0.3          | 0.5                  | 0.43                     | 2.07                       | 5.0                  |
| РО    | 1            | 0.3                  | 1.8                      | 7.01                       | 3.2                  |
| РО    | 3            | 0.5                  | 6.49                     | 30.31                      | 2.7                  |
| IV    | 1            | /                    | 3.97                     | 8.34                       | 2.5                  |
|       |              |                      |                          |                            |                      |

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$ 

## **REFERENCES**

[1]. Fukunari A, et al. Y-700 [1-[3-Cyano-4-(2,2-dimethylpropoxy)phenyl]-1H-pyrazole-4-carboxylic acid]: a potent xanthine oxidoreductase inhibitor with hepatic excretion. J Pharmacol Exp Ther. 2004 Nov;311(2):519-28.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com