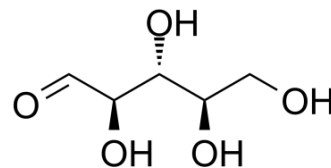


## D-Ribose(mixture of isomers)

Cat. No.:	HY-W018772		
CAS No.:	50-69-1		
Molecular Formula:	C <sub>5</sub> H <sub>10</sub> O <sub>5</sub>		
Molecular Weight:	150.13		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 100 mg/mL (666.09 mM; Need ultrasonic)

DMSO : ≥ 100 mg/mL (666.09 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass	1 mg	5 mg	10 mg
	Concentration			
	1 mM	6.6609 mL	33.3045 mL	66.6089 mL
	5 mM	1.3322 mL	6.6609 mL	13.3218 mL
	10 mM	0.6661 mL	3.3304 mL	6.6609 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**  
Solubility: ≥ 2.5 mg/mL (16.65 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**  
Solubility: ≥ 2.5 mg/mL (16.65 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**  
Solubility: ≥ 2.5 mg/mL (16.65 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

D-Ribose(mixture of isomers) is an energy enhancer, and acts as a sugar moiety of ATP, and widely used as a metabolic therapy supplement for chronic fatigue syndrome or cardiac energy metabolism. D-Ribose(mixture of isomers) is active in protein glycation, induces NF-κB inflammation in a RAGE-dependent manner<sup>[1]</sup>.

IC <sub>50</sub> & Target	Human Endogenous Metabolite
In Vitro	D-Ribose(mixture of isomers) is an energy enhancer, and acts as a sugar moiety of ATP, and widely used as a metabolic therapy supplement for chronic fatigue syndrome or cardiac energy metabolism <sup>[1]</sup> . D-Ribose(mixture of isomers) is active in protein glycation, induces NF-κB inflammation in a RAGE-dependent manner <sup>[1]</sup> .

## CUSTOMER VALIDATION

- **Oncogenesis.** 2020 Sep 17;9(9):82.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Hong J, et al. D-ribose induces nephropathy through RAGE-dependent NF-κB inflammation. Arch Pharm Res. 2018 Aug;41(8):838-847.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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