

## **Product** Data Sheet

## Transketolase-IN-2

 Cat. No.:
 HY-151600

 CAS No.:
 2757552-21-7

 Molecular Formula:
 C<sub>18</sub>H<sub>9</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S

Molecular Weight: 390.34

Target: Transketolase

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, protect from light, stored under nitrogen

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light, stored under

nitrogen)

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 33.33 mg/mL (85.39 mM; Need ultrasonic)

	Solvent Mass Concentration	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.5619 mL	12.8093 mL	25.6187 mL
21231. 221410113	5 mM	0.5124 mL	2.5619 mL	5.1237 mL
	10 mM	0.2562 mL	1.2809 mL	2.5619 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.40 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	Transketolase-IN-2 (compound 4w) is a potent Transketolase inhibitor. Transketolase-IN-2 shows strong inhibition of Digitaria sanguinalis and Amaranthus retroflexus (over 90% at 200 mg/L and about 80% at 100 mg/L). Transketolase-IN-2 can be used in studies of weed control <sup>[1]</sup> .
IC <sub>50</sub> & Target	${\sf Transketolase}^{[1]}.$
In Vitro	Transketolase-IN-2 (200 mg/L) exhibits strong inhibitory effects against DS with the root inhibition of 92% and the stem inhibition of 90% <sup>[1]</sup> .  Transketolase-IN-2 (200 mg/L) exhibits strong inhibitory effects against AR with the root inhibition of 91% and the stem inhibition of 90%.  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

	nthesis, and Herbicidal Activity of Naphthalimide-Aroyl Hybrids as Potent Transketolase Inhibitors. J Agric Food Chem. 2022 Oct
70(40):12819-12829.	
	Caution: Product has not been fully validated for medical applications. For research use only.
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