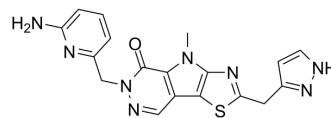


Tebapivat

Cat. No.:	HY-135884		
CAS No.:	2283422-04-6		
Molecular Formula:	C ₁₈ H ₁₆ N ₈ OS		
Molecular Weight:	392.44		
Target:	Pyruvate Kinase		
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	DMSO : 50 mg/mL (127.41 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.5482 mL	12.7408 mL	25.4816 mL
		5 mM	0.5096 mL	2.5482 mL	5.0963 mL
10 mM		0.2548 mL	1.2741 mL	2.5482 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 5 mg/mL (12.74 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Tebapivat (PKR activator 2) is a potent pyruvate kinase-R (PKR) activator extracted from patent WO2019035863A1, compound 385 ^[1] .
IC₅₀ & Target	Pyruvate kinase-R (PKR) ^[1]
In Vitro	Tebapivat (compound 385) activates wild type PKR, PKR K410E or PKR 510Q with AC ₅₀ values <0.3 μM ^[1] . Pyruvate kinase deficiency (PKD) is a disease of red blood cells caused by a deficiency of pyruvate kinase R (PKR) enzyme as a result of autosomal recessive mutations of the PKLR gene. PKR activators can be beneficial to treat disorders and conditions such as but not limited to PKD, thalassemia, hereditary elliptocytosis, anemia (e.g., congenital anemias (e.g., enzymopathies), hemolytic anemia (e.g. hereditary and/or congenital hemolytic anemia, acquired hemolytic anemia, chronic hemolytic anemia caused by phosphoglycerate kinase deficiency, anemia of chronic diseases, non-spherocytic hemolytic anemia or hereditary spherocytosis) ^[1] .

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Giovanni Cianchetta, et al. Pyruvate kinase activators for use in treating blood disorders. WO2019035863A1.

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

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