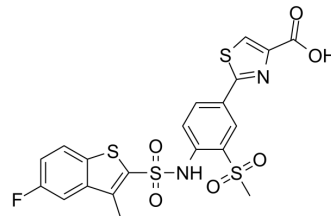


TY-51469

Cat. No.:	HY-12370		
CAS No.:	603987-59-3		
Molecular Formula:	C ₂₀ H ₁₅ FN ₂ O ₆ S ₄		
Molecular Weight:	526.6		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (63.29 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.8990 mL	9.4949 mL	18.9897 mL
5 mM	0.3798 mL	1.8990 mL	3.7979 mL
10 mM	0.1899 mL	0.9495 mL	1.8990 mL

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

BIOLOGICAL ACTIVITY

Description

TY-51469 is a chymase inhibitor with IC₅₀s for simian and human chymases of 0.4 and 7.0 nM, respectively.

IC₅₀ & Target

IC₅₀: 0.4 nM (Simian chymase), 0.7 nM (Human chymase)^[1]

In Vivo

TY-51469 shows 100% stability in rat plasma at 40°C for as long as 1 hour^[1]. TY-51469 suppresses the accumulation of neutrophils in the lung and reduces silica-induced pulmonary fibrosis in mice^[2].

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

PROTOCOL

Animal

Administration^[1]

Rats^[1]

The 2-week intravenous repeated-dose toxicity study of TY-51469 was conducted in male Sprague-Dawley rats at daily doses of 0 (control), 20, and 60 mg/kg^[1].

Mice^[1]

the chymase inhibitor TY-51469 was administered daily at a dose of 0.1 or 1.0 mg/kg/day for 21 days using an osmotic pump to male 8-week-old ICR mice. The osmotic pump released the drug solution continuously at a rate of 0.3 μ L/h for 21 days^[2].

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

REFERENCES

[1]. Takato H, et al. The specific chymase inhibitor TY-51469 suppresses the accumulation of neutrophils in the lung and reduces silica-induced pulmonary fibrosis in mice. Expert Opinion on Therapeutic Targets Volume 15, 2011 - Issue 4.

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

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