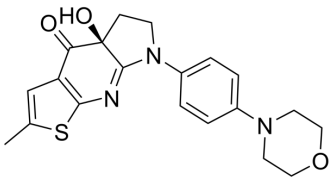
MPH-220

Cat. No.:	HY-148516
CAS No.:	2649776-79-2
Molecular Formula:	$C_{20}H_{21}N_3O_3S$
Molecular Weight:	383.46
Target:	Myosin
Pathway:	Cytoskeleton

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



BIOLOGICAL ACTIVITY

Description

MPH-220 is a selective and orally active inhibitor of skeletal muscle myosin-2. MPH-220 enables muscle relaxation. MPH-220 is anti-spastic agent that can be used in the research of spasticity and muscle stiffness[1].

In Vitro

MPH-220 (0-50 μM) inhibits Actin-activated ATPase activity in human muscle myosin samples[1].

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

In Vivo

MPH-220 (25-30 mg/kg, i.p. or oral gavage) reduces skeletal muscle force without cardiovascular effects in anesthetized rats [1].

MPH-220 (15 mg/kg, oral administration) improves gait functions in rats with brain injury[1].

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

Animal Model:	Anesthetized rats[1]
Dosage:	25-30 mg/kg
Administration:	Intraperitoneal injection (i.p.) or oral gavage
Result:	Reduced skeletal muscle force. Observed MPH-220 distribution in rat tissues in a time-dependent manner and a dose-dependent, few-fold accumulation in skeletal muscle.

REFERENCES

[1]. Gyimesi M, et al. Single Residue Variation in Skeletal Muscle Myosin Enables Direct and Selective Drug Targeting for Spasticity and Muscle Stiffness. Cell. 2020 Oct 15;183(2):335-346.e13.

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