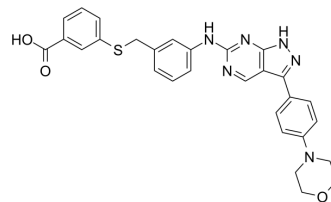


## Myosin V-IN-1

|                    |   |       |          |
|--------------------|---|-------|----------|
| Cat. No.:          | HY-152949   |       |          |
| CAS No.:           | 1259177-59-7  |       |          |
| Molecular Formula: | C <sub>29</sub> H <sub>26</sub> N <sub>6</sub> O <sub>3</sub> S |       |          |
| Molecular Weight:  | 538.62  |       |          |
| Target:            | Myosin  |       |          |
| Pathway:           | Cytoskeleton  |       |          |
| 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 : 100 mg/mL (185.66 mM; Need ultrasonic)

| Concentration | Mass      |           |            |
|---------------|-----------|-----------|------------|
|               | 1 mg      | 5 mg      | 10 mg      |
| 1 mM          | 1.8566 mL | 9.2830 mL | 18.5660 mL |
| 5 mM          | 0.3713 mL | 1.8566 mL | 3.7132 mL  |
| 10 mM         | 0.1857 mL | 0.9283 mL | 1.8566 mL  |

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

### BIOLOGICAL ACTIVITY

#### Description

Myosin V-IN-1 (compound 8) is a potent and selective Myosin V inhibitor, with a K<sub>i</sub> of 6 μM. Myosin V-IN-1 shows acute inhibition of myosin V. Myosin V-IN-1 slows the actin-activated myosin V ATPase by specifically inhibiting ADP release from the actomyosin complex<sup>[1][2]</sup>.

#### In Vitro

Myosin V-IN-1 (compound 8) shows dose-dependent reduction of the rate of steady-state actin-activated ATP hydrolysis by single-headed myosin V<sup>[1]</sup>.

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

### REFERENCES

[1]. Maschi D, et al. Myosin V Regulates Spatial Localization of Different Forms of Neurotransmitter Release in Central Synapses. *Front Synaptic Neurosci.* 2021 Apr 15;13:650334.

[2]. Islam K, et al. A myosin V inhibitor based on privileged chemical scaffolds. *Angew Chem Int Ed Engl.* 2010 Nov 2;49(45):8484-8.

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

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