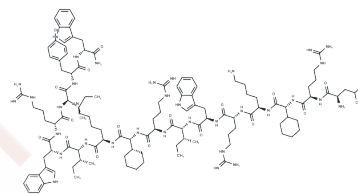


## Myostatin-IN-1

## Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 2757831-08-4  |
| Formula:          | C <sub>118</sub> H <sub>184</sub> N <sub>34</sub> O <sub>17</sub>   |
| Molecular Weight: | 2350.94   |
| Storage:          | Keep away from moisture<br>Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br><small>Actual storage temperature shall be subject to the COA.</small> |



## Biological Description

|             |   |
|-------------|---|
| Description | Myostatin-IN-1 is a powerful inhibitor of myostatin with IC <sub>50</sub> values of 0.19, 0.63, 0.89, and 1.6 μM for myostatin, GDF-11, activin A, and TGF-β1, respectively. It enhances the tibialis anterior muscle mass in mice and is applicable for studying extended myostatin inactivation in skeletal muscle [1]. |
| In vitro    | Myostatin-IN-1 (MID-35) (50 μM; 400 min) exhibits complete proteolytic stability, retaining 99% and 97% of its intact form after a 400-minute incubation in trypsin and α-chymotrypsin solutions, respectively [1].   |
| In vivo     | Myostatin-IN-1, administered intramuscularly as a single 0.75 mM dose, significantly increases tibialis anterior (TA) muscle mass in C57BL/6J mice (8 weeks) [1].   |

## Preparing Stock Solutions

|       | 1mg       | 5mg       | 10mg      |
|-------|-----------|-----------|-----------|
| 1 mM  | 0.4254 mL | 2.1268 mL | 4.2536 mL |
| 5 mM  | 0.0851 mL | 0.4254 mL | 0.8507 mL |
| 10 mM | 0.0425 mL | 0.2127 mL | 0.4254 mL |
| 50 mM | 0.0085 mL | 0.0425 mL | 0.0851 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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