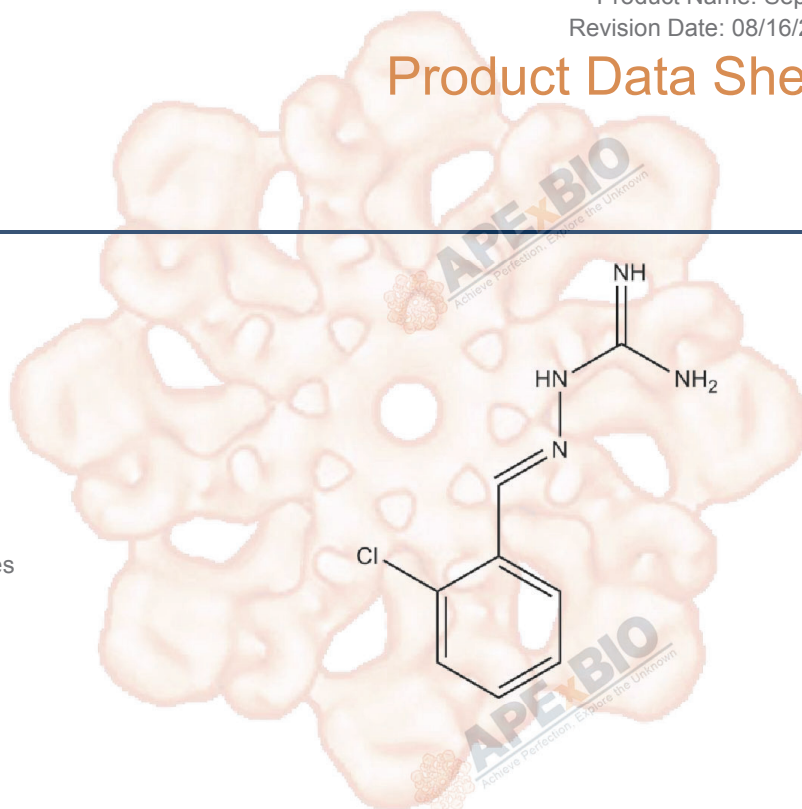


Product Data Sheet

Sephin1

| | |
|------------------|--|
| Cat. No.: | A8708 |
| CAS No.: | 13098-73-2 |
| Formula: | C ₈ H ₉ ClN ₄ |
| M.Wt: | 196.64 |
| Synonyms: | |
| Target: | Chromatin/Epigenetics |
| Pathway: | Protein Ser/Thr Phosphatases |
| Storage: | Store at -20°C |



Solvent & Solubility

insoluble in H₂O; insoluble in EtOH; ≥7.75 mg/mL in DMSO

| In Vitro | Preparing Stock Solutions | Mass | | | |
|----------|---------------------------|-----------------------|-----------|------------|------------|
| | | Solvent Concentration | 1mg | 5mg | 10mg |
| | | 1 mM | 5.0854 mL | 25.4272 mL | 50.8544 mL |
| | | 5 mM | 1.0171 mL | 5.0854 mL | 10.1709 mL |
| | | 10 mM | 0.5085 mL | 2.5427 mL | 5.0854 mL |

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

Biological Activity

Shortsummary

Selective PPP1R15A inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: HeLa and 293T cells

Preparation method: Limited solubility. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Reacting conditions: 6 h

| | | |
|---------|--------------------------|--|
| | Applications: | Sephin1 selectively disrupts the PPP1R15A-PP1c complex but leave the related PPP1R15B-PP1c complex unaffected. Thus Sephin1 prolongs eIF2a phosphorylation after stress, delays translation recover and attenuates expression of stress genes such as pro-apoptotic protein-CHOP. |
| In Vivo | Animal experiment | |
| | Animal models: | SOD1 mice SOD1G93A in C57BL/6J |
| | Dosage form: | 5 mg/kg |
| | Applications: | The progressive weight loss of SOD1 mutant mice and their motor deficits are almost completely prevented by 5 mg/kg of Sephin1 once a day, without adverse effects on weight gain or motor performance of wild-type mice. Sephin1 also prevents the motor deficits of SOD1 mutant mice that associated with motor neuron loss. |
| | Other notes: | Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal. |

Product Citations

See more customer validations on www.apexbt.com.

References

1. Das I, Krzyzosiak A, Schneider K et al. Preventing proteostasis diseases by selective inhibition of a phosphatase regulatory subunit. Science. 2015 Apr 10;348(6231):239-42.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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