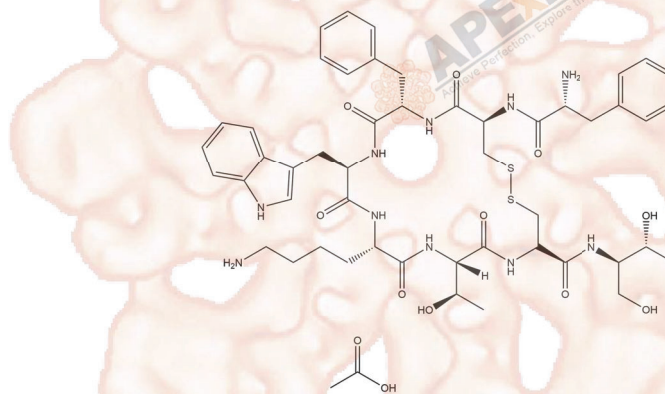


Octreotide acetate

| | |
|------------------|--|
| Cat. No.: | B4979 |
| CAS No.: | 79517-01-4 |
| Formula: | C ₅₁ H ₇₀ N ₁₀ O ₁₂ S ₂ |
| M.Wt: | 1079.29 |
| Synonyms: | SMS 201995; Sandostatin |
| Target: | GPCR/G protein |
| Pathway: | Somatostatin Receptor |
| Storage: | Store at -20° C |



Solvent & Solubility

≥53.96 mg/mL in DMSO; ≥10.04 mg/mL in EtOH; ≥28.85 mg/mL in H₂O

In Vitro

| Preparing Stock Solutions | Solvent Concentration | Mass | | |
|------------------------------|--------------------------|-----------|-----------|-----------|
| | | 1mg | 5mg | 10mg |
| | 1 mM | 0.9265 mL | 4.6327 mL | 9.2654 mL |
| | 5 mM | 0.1853 mL | 0.9265 mL | 1.8531 mL |
| | 10 mM | 0.0927 mL | 0.4633 mL | 0.9265 mL |

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

Biological Activity

Shortsummary

octapeptide congener of native somatostatin

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: Human HUV-EC-C endothelial cells

Preparation method:

The solubility of this compound in DMSO is >10 mM. 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:

1 μM, 72 hours

| | | |
|---------|--------------------------|---|
| | Applications: | Octreotide 1 nM produced a maximum 45.8% reduction of cell proliferation as compared to control cultures, from 9.7 to 4.4 x 10 ³ cells/well. To assess the influence of medium supplements on the inhibition of HUV-EC-C cell growth. Octreotide was tested against graded concentrations of ECGF and heparin in the culture medium. Overall, these changes did not significantly affect the growth-inhibitory activity of octreotide as compared to baseline conditions. |
| In Vivo | Animal experiment | |
| | Animal models: | Male Sprague-Dawley rats |
| | Dosage form: | Subcutaneous injection, 1 µg/kg, 10 µg/kg and 200 µg/kg |
| | Applications: | NREMS and SWA were normal after 1 µg/kg octreotide. REMS, however, enhanced significantly during the light period. The increases in REMS started 2–3 h postinjection and persisted during the rest of the day, although they were very small when the individual hours were considered. In response to 10 µg/kg octreotide, NREMS was significantly suppressed in hour 1 postinjection. Calculated for the 12-h light period, NREMS or SWA did not differ between the baseline and the octreotide days. |
| | 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] Danesi R, Agen C, Benelli U, et al. Inhibition of experimental angiogenesis by the somatostatin analogue octreotide acetate (SMS 201-995). *Clinical Cancer Research*, 1997, 3(2): 265-272.
- [2] Beranek L, Obal Jr F, Taishi P, et al. Changes in rat sleep after single and repeated injections of the long-acting somatostatin analog octreotide. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 1997, 273(4): R1484-R1491.

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. Shortterm 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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