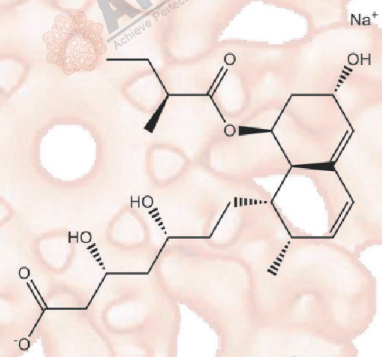
Product Data Sheet

# Pravastatin sodium



| | |
|---|---|
| **Cat. No.:** | A4369 |
| **CAS No.:** | 81131-70-6 |
| **Formula:** | C23H35O7·Na |
| **M.Wt:** | 446.51 |
| **Synonyms:** | |
| **Target:** | Metabolism |
| **Pathway:** | HMG-CoA Reductase |
| **Storage:** | Store at -20°C |

## Solvent & Solubility

In Vitro

⩾100.4 mg/mL in EtOH with ultrasonic; ⩾13.15 mg/mL in DMSO; ⩾98.8 mg/mL in H2O

Preparing Stock Solutions

| Mass / Solvent / Concentration | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.2396 mL | 11.1980 mL | 22.3959 mL |
| 5 mM | 0.4479 mL | 2.2396 mL | 4.4792 mL |
| 10 mM | 0.2240 mL | 1.1198 mL | 2.2396 mL |

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

## Biological Activity

| | |
|---|---|
| Shortsummary | HMG-CoA reductase inhibitor,highly selective and competitive |
| $IC_{50}$ & Target | |

In Vitro

**Cell Viability Assay**

| | |
|---|---|
| Cell Line: | J-774 A.1 macrophage-like cells, human monocyte derived macrophages (HMDM) and mouse peritoneal macrophages (MPM) |
| Preparation method: | The solubility of this compound in DMSO is > 13.2 mg/mL. 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: | 0 ~ 100 μg/mL; 5 hrs |
| | Applications: | In J-774 A.1 macrophage-like cells, HMDM and MPM, Pravastatin Sodium reduced cholesterol biosynthesis in a dose-dependent manner, with the IC50 values of 0.08 μg/mL, 6.3 μg/mL and 7.8 μg/mL, respectively. In J-774 A.1 macrophage-like cells, Pravastatin Sodium increased degradation of low density lipoprotein (LDL), but not degradation of acetyl LDL and oxidized LDL. |
| In Vivo | **Animal experiment** | |
| | Animal models: | Otsuka Long-Evans Tokushima Fatty (OLETF) rats |
| | Dosage form: | 100 mg/kg/day; p.o.; for 8 weeks |
| | Applications: | In OLETF rats, Pravastatin Sodium slightly reduced the fasting blood glucose level. However, Pravastatin Sodium significantly reduced superoxide production of vascular wall. In addition, Pravastatin Sodium normalized the level of serum glyceraldehyde-derived advanced glycation end-products (Glycer-AGEs). |
| | 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]. Keidar S, Aviram M, Maor I, Oiknine J, Brook JG. Pravastatin inhibits cellular cholesterol synthesis and increases low density lipoprotein receptor activity in macrophages: in vitro and in vivo studies. Br J Clin Pharmacol. 1994 Dec;38(6):513-9.

[2]. Hori E, Kikuchi C, Nagami C, Kajikuri J, Itoh T, Takeuchi M, Matsunaga T. Role of Glyceraldehyde-derived AGEs and Mitochondria in Superoxide Production in Femoral Artery of OLETF Rat and Effects of Pravastatin. Biol Pharm Bull. 2017 Aug 22.

## 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 APExBIO 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.*

**APExBIO Technology**
**www.apexbt.com**
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com