**Chemical Properties**

**Product Name:** Valrocemide

**Cas No.:** 92262-58-3

**M.Wt:** 200.28

**Formula:** C10H20N2O2

**Chemical Name:** N-(2-amino-2-oxoethyl)-2-propylpentanamide

**Canonical SMILES:** CCCCC(CCC)C(NCC(N)=O)=O

**Solubility:** ≥20mg/mL in DMSO

**Storage:** Store at -20°C

**General tips:** For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

**Shopping Condition:** Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

**Biological Activity**

**Targets:** Others

**Pathways:** Others

**Description:**

Epilepsy is a chronic condition requiring long-term drug treatment, often for the patient’s entire life. Valrocemide is an anticonvulsant agent under development by Teva and Acorda as a therapeutic for the treatment of epilepsy.

*In vitro:* It was found that 1 mM of valrocemide could drastically inhibit human brain crude homogenate MIP synthase activity. Furthermore, the mechanism of the effect of valrocemide were studied and results showed that valrocemide reduced the enzyme activity by an apparent competitive mode of inhibition [1].
In vivo: In mice, valrocemide showed complete protection against maximal electroshock-, pentylenetetrazole-, picrotoxin-, bicuculline-induced seizures as well as 6-Hz "psychomotor" seizures with ED50 values of 151, 132, 275, 248, and 237 mg/kg, respectively. Valrocemide was also effective in preventing sound-induced seizures in Frings audiogenic-seizure susceptible mice. The neurotoxic dose in mice was 332 mg/kg. After oral administration to rats, valrocemide was active in the maximal electroshock test, with an ED50 of 73 mg/kg, and the median neurotoxic dose was 1,000 mg/kg. IP administration of 300 mg/kg of valrocemide to hippocampal kindled SD rats blocked generalized seizures and shortened the afterdischarge duration significantly. Valrocemide also had complete protection from focal seizures in the corneally kindled rats [2].

Clinical trial: Valrocemide is a new antiepileptic drug currently undergoing phase II clinical trials in patients with refractory epilepsy [2].

Reference:

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. 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.