Product Data Sheet

Chemical Properties

Product Name: Vialinin A
Cas No.: 858134-23-3
M.Wt: 562.57
Formula: C34H26O8

Chemical Name: [3,4-dihydroxy-2,5-bis(4-hydroxyphenyl)-6-(2-phenylacetyl)oxyphenvyl] 2-phenylacetate

Canonical SMILES: C1=CC=C(C=C1)CC(=O)OC2=C(C=C(C2C3=CC=C(C=C3)O)O)O)C4=CC=C(C=C4)O)OC(=O)CC5=CC=CC=C5

Solubility: Soluble 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: Ubiquitination/Proteasome
Pathways: DUB

Description:

Vialinin A is a potent inhibitor of ubiquitin-specific peptidases with IC50 values of 1.5, 5.9 and 22.3 μM for ubiquitin-specific peptidase 4 (USP4), USP5/isopeptidase T (IsoT) and UCH-L1 deubiquitinating enzyme (DUB), respectively [1]. Ubiquitin-specific peptidases (USPs) are a series of proteases that deubiquitinate target proteins. The dynamic modification of a protein with ubiquitin can modify its function, localization and fate.
in the cell. Ubiquitin hydrolase plays an important role in immunology and infection [2]. In RBL-2H3 cells, vialinin A inhibited TNF-α production and release and inhibited USP5 enzymatic activity. In USP5 siRNA-knockdown RBL-2H3 cells, vialinin A inhibited TNF-α production and release in a dose dependent way. Also, the mRNA expression of TNF-α was decreased significantly [2]. In RBL-2H3 cells, Vialinin A inhibited TNF-α production with IC50 value of 0.09 nM. Also, it inhibited the release of interleukin 4, β-hexosaminidase and monocyte chemotactic protein 1, which suggested Vialinin A had anti-allergic activities [3].

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.