### Chemical Properties

**Product Name:** Alogliptin Benzoate  

**Cas No.:** 850649-62-6  

**M.Wt:** 461.51  

**Formula:** C25H27N5O4  

**Synonyms:** SYR322, SYR-322, Nesina;  

**Chemical Name:** 2-[[6-[(3R)-3-aminopiperidin-1-yl]-3-methyl-2,4-dioxopyrimidin-1-yl]methyl]benzonitrile; benzoic acid  

**Canonical SMILES:** CN1C(=O)C=C(N(C1=O)CC2=CC=CC=C2C#N)N3CCCC(C3)N.C1=CC=C(C=C1)C(=O)O  

**Solubility:** >46.2mg/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:** Proteases  

**Pathways:** DPP-4  

**Description:**  
Alogliptin is a novel, highly selective and potent inhibitor of serine protease dipeptidylpeptidase-4 (DPP-4) with IC50 value of less than 10 nM [1].  
Alogliptin has been reported to significantly reduce plasma DPP-4 activity and increase active GLP-1 levels in a dose-dependent manner in ob/ob mice. Besides, alogliptin after 4 weeks
administration remarkably reduced non-fasting glycosylated hemoglobin, non-fasting plasma glucose and triglyceride levels, as well as significantly increased non-fasting plasma insulin and fasting pancreatic insulin content in ob/ob mice. Moreover, alogliptin treated ob/ob mice have shown the increase of early-phase insulin secretion and the decrease of plasma glucose AUC [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. 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.