

# PRODUCT INFORMATION



## Trelagliptin

Item No. 18504

**CAS Registry No.:** 865759-25-7  
**Formal Name:** 2-[[6-[(3R)-3-amino-1-piperidinyl]-3,4-dihydro-3-methyl-2,4-dioxo-1(2H)-pyrimidinyl]methyl]-4-fluoro-benzonitrile

**Synonym:** SYR-472  
**MF:** C<sub>18</sub>H<sub>20</sub>FN<sub>5</sub>O<sub>2</sub>

**FW:** 357.4

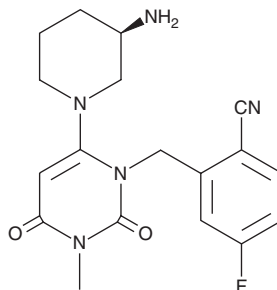
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 276 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Trelagliptin is supplied as a crystalline solid. A stock solution may be made by dissolving the trelagliptin in the solvent of choice, which should be purged with an inert gas. Trelagliptin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of trelagliptin in these solvents is approximately 1 and 2 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of trelagliptin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of trelagliptin in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Trelagliptin is an inhibitor of dipeptidyl peptidase 4 (DPP-4; IC<sub>50</sub> = 4 nM).<sup>1</sup> It is greater than 10,000-fold selective for DPP-4 over isopeptidases. Trelagliptin (7 mg/kg) inhibits plasma DPP-4 activity and reduces postprandial plasma insulin levels in Zucker *fa/fa* rats. Formulations containing trelagliptin have been used in the treatment of type 2 diabetes mellitus.

### Reference

1. Kushwaha, R.N., Haq, W., and Katti, S.B. Discovery of 17 gliptins in 17-years of research for the treatment of type 2 diabetes: A synthetic overview. *Chemistry and Biology Interface* 4(3), 137-162 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/02/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM