

ZED-1227

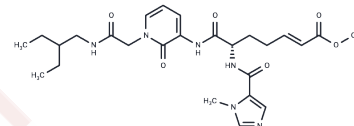
## Chemical Properties

CAS No. : 1542132-88-6

Formula: C<sub>26</sub>H<sub>36</sub>N<sub>6</sub>O<sub>6</sub>

Molecular Weight: 528.6

Storage: Store at low temperature, Keep away from direct sunlight  
 Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
 Actual storage temperature shall be subject to the COA.



## Biological Description

Description	ZED-1227 (TAK-227) is an orally active, selective and potent transglutaminase 2 (TG2) inhibitor with anticancer activity that blocks inflammation-induced TG2 expression and activation for the treatment of Celiac Disease.
Targets(IC50)	Glutaminase
In vitro	ZED-1227, at concentrations ranging from 0.1 μM to 1 μM for 24 hours, does not impact metabolic activity and proliferation in Huh7 cells and CaCo2 cells. This lack of effect suggests that ZED-1227 does not exhibit cytotoxic activity[1]. In an in vitro setting, ZED-1227, when applied at concentrations between 0.002 and 0.2 mg/mL for 30 minutes, inhibits transglutaminase 2 (TG2) in the small intestinal mucosa [1].
In vivo	In mice, ZED-1227 reduces the activity of intestinal TG2 induced by Polyinosinic: Polycytidylic acid (40 mg/kg) to levels comparable to normal control levels. Additionally, ZED-1227 administration subdues intestinal inflammation in these mice[1]. Furthermore, when administered orally (5 mg/kg; i.g.), ZED-1227 is effective in inhibiting TG2 in the small intestinal mucosa[1].

## Solubility Information

Solubility	DMSO: 100 mg/mL (189.18 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.8918 mL	9.4589 mL	18.9179 mL
5 mM	0.3784 mL	1.8918 mL	3.7836 mL
10 mM	0.1892 mL	0.9459 mL	1.8918 mL
50 mM	0.0378 mL	0.1892 mL	0.3784 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Christian Büchold, et al. Pyridinone derivatives as tissue transglutaminase inhibitors. WO2014012858A1.

Manu Encalada, et al. The Oral Transglutaminase 2 (TG2) Inhibitor Zed1227 Blocks TG2 Activity in a Mouse Model of Intestinal Inflammation. Gastroenterology. 154(6):S-490.

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Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481