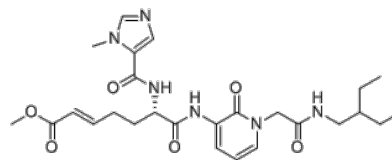


**Product Name** : ZED1227  
**Cat. No.** : PC-38770  
**CAS No.** : 1542132-88-6  
**Molecular Formula** : C<sub>26</sub>H<sub>36</sub>N<sub>6</sub>O<sub>6</sub>  
**Molecular Weight** : 528.610  
**Target** : Glutaminase  
**Solubility** : 10 mM in DMSO



### Biological Activity

Vilagletistat (ZED1227, ZED-1227) is a potent, selective, covalent, and orally active **transglutaminase 2 (TGase 2, TG2)** inhibitor with IC<sub>50</sub> of 45 nM.

ZED1227 selectively binds to the active state of TG2, forming a stable covalent bond with the cysteine in TG2 catalytic center.

ZED1227 blocks inflammation-induced TG2 expression and activity, inhibits TG2 in the small intestinal mucosa in vitro, with no significant cytotoxic activity.

ZED1227 reduces the activity of intestinal TG2 induced by polyinosinic:polycytidylic acid (40 mg/kg) to normal control levels and subdues intestinal inflammation in mice.

ZED1227 shows potential for treatment and research of celiac disease.

### References

Büchold C, et al. **Cells**. 2022 May 17;11(10):1667.

Schuppan D, et al. **N Engl J Med**. 2021 Jul 1;385(1):35-45.

Manu Encalada, et al. **Gastroenterology**. 154(6):S-490.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com