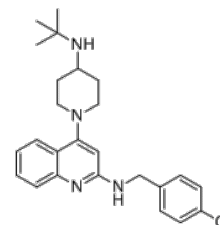


**Product Name** : GNS561  
**Cat. No.** : PC-72561  
**CAS No.** : 1914148-72-3  
**Molecular Formula** : C<sub>25</sub>H<sub>31</sub>ClN<sub>4</sub>  
**Molecular Weight** : 422.99  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



## Biological Activity

GNS561 (Ezurpimtrostat, GNS-561) is a novel lysosomotropic agent and autophagy inhibitor that induces lysosomal cell death, targets palmitoyl-protein thioesterase 1 (**PPT1**).

GNS561 induced a dramatic increase of CSC death in both HCC and liver mCRC cell lines, displays antitumor properties in HCC in vivo models.

GNS561 activates the caspase-dependent apoptosis pathway, induces lysosomal membrane permeabilization and cathepsin-dependent cell death in HepG2 cells.

GNS561 showed potent antitumor activity ranging from 0.22  $\mu$ M for the most sensitive cell line (LN-18, a glioblastoma cell line) to 7.27  $\mu$ M for the least sensitive cell line (OVCAR3, ovarian cancer cell line).

GNS561 was at least 10-fold more effective than HCQ in tested cancer cell lines, also displayed activity in primary HCC patient-derived cells and was on average 3-fold more potent than sorafenib.

GNS561 exhibits potent antiviral activity against SARS-CoV-2 through autophagy inhibition.

## References

Sonia Brun, et al. *Autophagy*. 2021 Nov 5;1-17.

Bestion E, et al. *Viruses*. 2022 Jan 12;14(1):132. doi: 10.3390/v14010132.

Brun S, et al. *J Cancer*. 2021 Jul 13;12(18):5432-5438.

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

E-mail: tech@probechem.com