

Product Datasheet

Nec-1s

Catalog No. **BP-02348** · CAS **852391-15-2** · Form **free base** · Physical state **solid** · Color **White to light yellow** · Version **1.0** · Revision **2026-09-10**

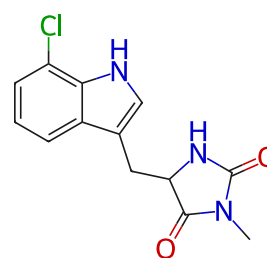
FOR RESEARCH USE ONLY. NOT FOR HUMAN OR VETERINARY USE.

Target RIP kinase	Research area Cancer
-----------------------------	--------------------------------

Molecular formula **C₁₃H₁₂ClN₃O₂**

Molecular weight **277.7060**

STRUCTURE



DESCRIPTION

Necrostatin 2 is a potent necroptosis inhibitor with EC₅₀ of 50 nM.

BIOLOGICAL ACTIVITY

Necrostatin-2 racemate (also known as 7-Cl-O-Nec-1 and Nec-1s) is a potent and specific receptor-interacting protein kinase 1 (RIPK1) inhibitor lacking the IDO-targeting effect, with >1000-fold more selective for RIPK1 than for any other kinase out of 485 human kinases.

In vivo, Nec-1s is effective in reducing brain injuries. It is a superior inhibitor suitable for use in vivo lacking a paradoxical sensitizing effect in TNF-induced lethality. Nec-1s possesses several advantageous pharmacokinetic and pharmacodynamic characteristics in comparison to Nec-1. Safety profile of Nec-1s is also superior to that of Nec-1 for reduced in vivo and in vitro toxicity.

SOLUBILITY

Soluble in DMSO

In vitro DMSO : ≥ 50 mg/mL

REFERENCES

- [1]. Meng, H., Wu, G., Zhao, X. et al. Discovery of a cooperative mode of inhibiting RIPK1 kinase. Cell Discov 7, 41 (2021). <https://doi.org/10.1038/s41421-021-00278-x>
- [2]. Takahashi, N., et al. . Necrostatin-1 analogues: Critical issues on the specificity, activity and in vivo use in experimental disease models. Cell Death Dis. 3, e437 (2012).

[3]. Huang, Z., et al. Necrostatin-1 rescues mice from lethal irradiation. *Biochim. Biophys. Acta* 1862(4), 850-856 (2016).

Tel: +86 20 31130026 · Fax: +86 20 36822386 · tech@biochemprobe.com · www.biochemprobe.com

BiochemProbe is the catalog brand of Guangzhou Yuyuan Biotech Co., Ltd. · For research use only.

Lot CoA and SDS are separate documents.