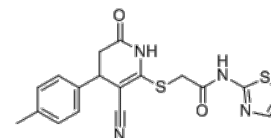


**Product Name** : Necrostatin-34  
**Cat. No.** : PC-73007  
**CAS No.** : 375835-43-1  
**Molecular Formula** : C<sub>18</sub>H<sub>16</sub>N<sub>4</sub>O<sub>2</sub>S<sub>2</sub>  
**Molecular Weight** : 384.48  
**Target** : RIP kinase  
**Solubility** : 10 mM in DMSO



## Biological Activity

Necrostatin-34 (Nec-34) is a novel small molecule inhibitor of **RIPK1 kinase**, inhibits TNF $\alpha$ -induced necroptosis in FADD-deficient Jurkat cells with IC<sub>50</sub> of 0.67  $\mu$ M.

Nec-34 effectively inhibited necroptosis induced by the addition of AP20187 and zVAD.fmk, inhibited the dimerization-induced RIPK1 activation as examined by phosphorylation of Ser166 (p-S166) of RIPK1, a biomarker for RIPK1 activation. Nec-34 showed no effect on the early activation signatures of NF- $\kappa$ B and MAPK pathways, including phosphorylation of IKK $\alpha$ / $\beta$ , p65, p38, JNK, MK2, I $\kappa$ B $\alpha$ , and degradation of I $\kappa$ B $\alpha$ .

Nec-34 inhibited the activity of RIPK1 (IC<sub>50</sub>=5.5  $\mu$ M, 111 mM ATP) and disrupted the formation of complex II.

Nec-34 inhibits RIPK1 kinase through a mechanism distinct from that of Nec-1s.

## References

Huyan Meng, et al. *Cell Discov.* 2021 Jun 1;7(1):41.

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

E-mail: tech@probechem.com