

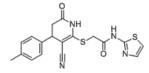
## **Data Sheet**

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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 IC50 of 0.67 uM.

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 (IC50=5.5 uM, 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!

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