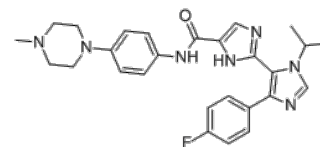


**Product Name** : INS018\_055  
**Cat. No.** : PC-21563  
**CAS No.** : 2828567-39-9  
**Molecular Formula** : C<sub>27</sub>H<sub>30</sub>FN<sub>7</sub>O  
**Molecular Weight** : 487.58  
**Target** : TNIK  
**Solubility** : 10 mM in DMSO



CAS: 2828567-39-9

## Biological Activity

INS018\_055 (INS018-055) a selective small-molecule TRAF2- and NCK-interacting kinase (**TNIK**) inhibitor with K<sub>d</sub> value of 4.32 nM and IC<sub>50</sub> of 31 nM, inhibits TGF-β-induced α-SMA protein expression in MRC-5 cells with IC<sub>50</sub> of 27.14 nM. INS018\_055 demonstrates a broad affinity toward targeting fibrosis-related kinases. INS018\_055 potently inhibits TGF-β-mediated α-SMA expression in primary lung fibroblasts from patients with IPF, effectively inhibits key fibrotic pathways such as WNT-β-catenin, TGF-β-SMAD2, TNF-α-NF-κB and YAP-TAZ signaling. INS018\_055 (3, 10 or 30 mg per kg, BID) attenuates murine bleomycin-induced lung fibrosis. INS018\_055 reduces murine lipopolysaccharide-induced lung inflammation.

## References

- Patent WO2022179528A1.
- Aladinskiy V, et al. *J Med Chem*. 2024 Oct 18. doi: 10.1021/acs.jmedchem.4c01580.

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

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