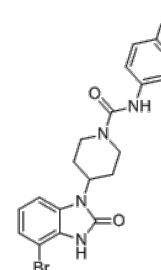


**Product Name** : TH5487  
**Cat. No.** : PC-35806  
**CAS No.** : 2304947-71-3  
**Molecular Formula** : C<sub>19</sub>H<sub>18</sub>BrIN<sub>4</sub>O<sub>2</sub>  
**Molecular Weight** : 541.187  
**Target** : DNA Repair Protein  
**Solubility** : 10 mM in DMSO



## Biological Activity

TH5487 (TH-5487, TH 5487) is a potent, selective, active-site inhibitor of **8-oxoguanine DNA glycosylase 1 (OGG1)** with IC<sub>50</sub> of 342 nM, prevents OGG1 from binding to its DNA substrate.

TH5487 does not affect the activity of other DNA glycosylases or various Nudix hydrolases and diphosphatase, also not intercalate DNA.

TH5487 decreases binding of OGG1 to promoters in chromatin, engages OGG1 in cells, inhibits DNA repair, and alters OGG1 chromatin dynamics.

TH5487 specifically inhibit OGG1-dependent proinflammatory gene expression, decreases CXCL1 expression by >50% in wild-type but not in OGG1-knockout cells at 5 uM, inhibits TNF $\alpha$ -induced expression of TNF in hSAECs.

TH5487 suppresses proinflammatory gene expression and lung inflammation in mice (30 mg/kg, i.p.).

## References

Visnes T, et al. *Science*. 2018 Nov 16;362(6416):834-839.

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

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