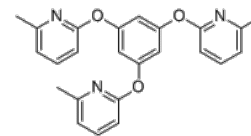


**Product Name** : NX-13  
**Cat. No.** : PC-49115  
**CAS No.** : 2389235-01-0  
**Molecular Formula** : C<sub>24</sub>H<sub>21</sub>N<sub>3</sub>O<sub>3</sub>  
**Molecular Weight** : 399.450  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



## Biological Activity

NX-13 (Amelenodor) is an orally active, gut-restricted **NLRX1** agonist, has in situ binding effects on the stability of NLRX1 with EC<sub>50</sub> of 58 nM.

NX-13 modulates CD4<sup>+</sup> T cell differentiation and metabolism, NX-13 significantly decreased the differentiation of Th1 and Th17 at 0.05 μM with a dose response and suppressive effect down to 0.005 μM.

NX-13 (10 mg/kg, oral) reduces inflammation in a model of DSS colitis.

NX-13 reduces inflammation and alters NLRX1 signaling in PBMCs from ulcerative colitis (UC) patients, decreases NF-κB activity, TNFα<sup>+</sup> and IFNγ<sup>+</sup> CD4<sup>+</sup> T cells and overall production of IL-6, MCP1 and IL-8.

NX-13 is a promising immunometabolic oral, gut-restricted therapeutic for CD and UC that is effective at reducing inflammation in DSS, adoptive transfer and Mdr1a<sup>-/-</sup> mouse models of IBD plus in in vitro studies using primary murine and human cells.

NLRX1 (Nucleotide-binding oligomerization domain, leucine rich repeat containing X1) is a mitochondria-associated receptor involved in down-regulating inflammation during bacterial and viral exposure, acute non-infectious colitis, colorectal cancer and chronic pulmonary disease.

## References

Leber A, et al. *J Immunol.* 2019 Dec 15;203(12):3407-3415.

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

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