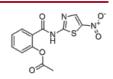


WWW.PROBECHEM.COM

## **Data Sheet**

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Nitazoxanide
Cat. No.	:	PC-49553
CAS No.	:	55981-09-4
Molecular Formula	:	$C_{12}H_9N_3O_5S$
Molecular Weight	:	307.28
Target	:	HBV
Solubility	:	10 mM in DMSO



## **Biological Activity**

Nitazoxanide (NTX) is a thiazolide anti-infective agent that efficiently inhibits the **HBV** regulatory protein X (HBx)-DDB1 protein interaction, exhibits potent inhibition of both **HBV** and **HCV** replication.

Nitazoxanide significantly restores Smc5 protein levels and suppresses viral transcription and viral protein production in the HBV minicircle system and in human primary hepatocytes naturally infected with HBV.

Nitazoxanide is active against anaerobic bacteria, protozoa, and a range of viruses in cell culture model.

Nitazoxanide is equally effective at inhibiting replication of lamivudine (LMV) and adefovir dipovoxil (ADV)-resistant HBV mutants and against 2'-C-methyl cytidine (2'CmeC) and telaprevir (VX-950)-resistant HCV mutants.

Nitazoxanide displayed synergistic interactions with LMV or ADV against HBV, and with recombinant interferon alpha-2b (IFN) or 2'CmeC against HCV.

## References

Korba BE, et al. *Antiviral Res*. 2008 Jan;77(1):56-63. Keeffe EB, et al. *World J Gastroenterol*. 2009 Apr 21;15(15):1805-8. Sekiba K, et al. *Cell Mol Gastroenterol Hepatol*. 2019;7(2):297-312. Sekiba K, et al. *J Hepatol*. 2022 Jan;76(1):53-62.

> Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com