

Product Datasheet

Nitazoxanide (orb1224663)

Catalog Number orb1224663

Category Small Molecules

Description Nitazoxanide, also known by the brand name Alinia, is a synthetic nitrothiazolyl-salicylamide derivative and an anti-protozoal agent. It is approved for treatment of infectious diarrhea caused by *Cryptosporidium parvum* and *Giardia lamblia* in patients 1 year of age and older. Following oral administration it is rapidly hydrolyzed to its active metabolite, tizoxanide, which is 99% protein bound. Peak concentrations are observed 1-4 hours after administration. It is excreted in the urine, bile and feces. Untoward effects include abdominal pain, vomiting and diarrhea. (In Vitro):*Giardia lamblia*, a flagellated protozoan, is the most common causative agent of persistent diarrhea worldwide. Nitazoxanide exhibits effect on *G. lamblia* trophozoite proliferation in axenic culture with an IC₅₀ of 2.4 μM. (In Vivo): Nitazoxanide exhibits a wide spectrum of in vivo activity against a broad spectrum of intestinal parasites, such as *Giardia lamblia*, *Entamoeba histolytica*, *Trichomonas vaginalis*, the apicomplexan *Cryptosporidium parvum*, and enteric bacteria infecting animals and humans. Nitazoxanide (50, 75 or 100 mg/kg/day; administered daily by intragastric for up to 25 days) reduces the mortality of Japanese encephalitis virus (JEV) strain-infected mice and protected mice from a lethal dose challenge of JEV.

Target PFOR

Purity >98% (HPLC)

MW 307.28

Target Areas PFOR

Solubility (25°C) DMSO: 62 mg/mL (201.77 mM)

CAS Number 55981-09-4

Formula C₁₂H₉N₃O₅S

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SMILES	<chem>CC(OC1=CC=CC=C1C(NC2=NC=C([N+])([O-])=O)S2)=O)=O</chem>
Chemical Name	[2-[(5-nitro-1,3-thiazol-2-yl)carbamoyl]phenyl] acetate
Storage	Storage temperature: -20°C. Stability: ≥ 2 years
Note	For research use only
Expiration Date	12 months from date of receipt.

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