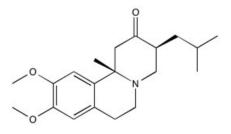
Tribioscience

Nitazoxanide, Wnt inhibitor; Antiviral

Catalog	Unit
TBI4633-10MG	10 mg
TBI4633-50MG	50 mg

Product Details

Formal Name: O-[N-(5-Nitrothiazol-2-yl)carbamoyl]phenyl acetate Molecular Formula: $C_{12}H_9N_3O_5S$ Formula Weight: 307.28 CAS Number: 55981-09-4 Purity: >98% Formulation: powder Solubility: Soluble in DMSO (up to at least 50 mg/ml) Storage: -20°C Stability: \geq 1 year.



Applications

Wnt inhibitor; Antiviral

Functions

Nitazoxanide is a clinically relevant antiparasitic agent.11t has since been repurposed as a broad-spectrum antiviral agent that is active against many RNA and DNA viruses including influenza, Hepatitis B and C, RSV, coronavirus, dengue and others.2 Its antiparasitic activity is believed to be due to inhibition of pyruvate:ferredoxin/flavodoxin oxidoreductases.3 Antiviral activity involves activation of protein kinase activated by double-stranded RNA (PKR) leading to phosphorylation of eukaryotic initiation factor 2 alpha (eIF2 α).4 Nitazoxanide has also been found to inhibit Wnt signaling independent of adenomatous polyposis coli (APC) – it targets peptidyl arginine deiminase 2 (PAD2) resulting in increased citrullination of β -catenin.5

Application Procedures

First dissolved in DMSO (up to at least 50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 week.

For research use only.