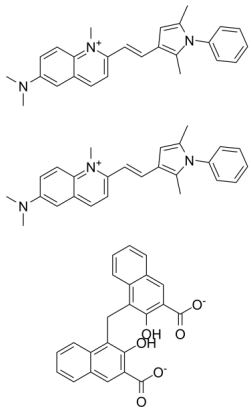


Data Sheet

Product Information

Catalog Number	BP22554
Product Name	Pyrvinium pamoate
Description	Pyrvinium pamoate is an FDA-approved antihelmintic drug that inhibits WNT pathway signaling.
In vitro	<p>Pyrvinium pamoate (0-500 nM) inhibits proliferation of MCF-7 (luminal), MDA-MB-231 (claudin-low), MDA-MB-468 (basal-like) and SkBr3 (HER2-OE) cells in a dose-dependent manner, with IC₅₀ value of 1170±105.0 nM against MDA-MB-231 cell line. Pyrvinium pamoate significantly inhibits self-renewal and proliferation of BCSCs, and suppresses BCSC population with a distinct phenotype. Pyrvinium pamoate significantly decreases average expression levels of FZD1, FZD10, WNT1, WNT7B, CTNNB1, MYC, and LRP5 at transcriptional level. Moreover, Pyrvinium pamoate also efficiently down-regulates the expression of other stemness genes including ALDH1, CD44 and ABCG2. Pyrvinium pamoate blocks colon cancer cell growth in vitro in a dose-dependent manner with great differences in the inhibitory concentration (IC₅₀), ranging from 0.6 to 65 μM for colon cancer cells with mutations in WNT signaling. Pyrvinium pamoate decreases messenger RNA (mRNA) and protein levels of known WNT target genes as c-MYC and thereby led to the induction of p21. Pyrvinium pamoate ultimately inhibits Wnt signalling despite its lack of efficacy on CK1. Pyrvinium pamoate imposes specific toxicity on cardiac fibroblasts in ischemia (IC₅₀=9.5 nM). The cytotoxic effect of Pyrvinium pamoate on cardiac fibroblasts specifically under glucose- and glutamine-deficient condition.</p>
In vivo	In the xenograft model, Pyrvinium pamoate (500 nM)-pretreatment strongly delays tumor size and tumor weight, and the tumor volume is markedly decreased.
CAS No.	3546-41-6
Chemical Formula	C ₂₆ H ₂₈ N ₃ .1/2 C ₂₃ H ₁₄ O ₆

Molecular Weight	575.7
Solubility	DMSO: 17.86 mg/mL (31.02 mM, Need ultrasonic)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

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