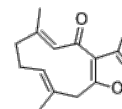


Product Name : Furanodienone
Cat. No. : PC-24051
CAS No. : 24268-41-5
Molecular Formula : C₁₅H₁₈O₂
Molecular Weight : 230.31
Target : Pregnane X Receptor (PXR)
Solubility : 10 mM in DMSO



Biological Activity

Furanodienone is a major bioactive component of sesquiterpenes produced from *Rhizoma Curcumae*, shows anticancer efficacy against different types of cancer, is a selective pregnane X receptor (PXR) agonist with EC₅₀ of 2.8 μM in GAL4-hPXR-LBD-transfected HG5LN cells.

Furanodienone binds within a sub-pocket of the PXR ligand binding domain (LBD, ITC K_d=4.5 μM), with subsequent alterations in LBD structure.

Furanodienone has potent PXR-dependant anti-inflammatory outcomes that are colon-specific.

Furanodienone significantly mitigate systemic inflammation and colitis in mice with no deleterious effects in other tissues.

Furanodienone induces apoptosis via regulating the PRDX1/MAPKs/p53/caspases signaling axis through NOX4-derived mitochondrial ROS in colorectal cancer cells.

References

Wang X, et al. Nat Commun. 2025 Feb 3;16(1):1280.

Jiang Y, et al. Biochem Pharmacol. 2024 Sep;227:116456.

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

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