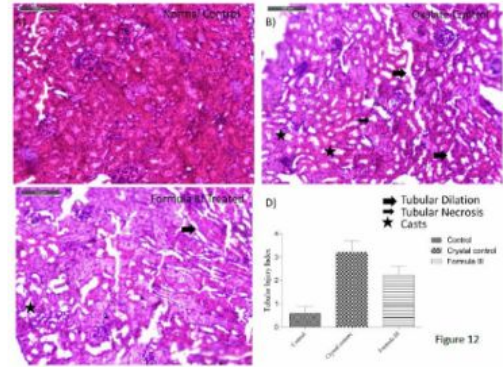




GRANTED

(IN513419)

Compounds as pro-inflammatory cytokine inhibitor



NEED

Chronic inflammatory diseases affect over 20% of the global population, causing \$300B healthcare burden annually. Current treatments trigger side effects or lose effectiveness over time, leaving millions at risk of disability, pain, and life-threatening complications.

TECHNOLOGY OVERVIEW

This invention offers novel coumarin-based lignan compounds designed to inhibit pro-inflammatory cytokines precisely. These small molecules provide a targeted therapeutic path for chronic conditions like arthritis, asthma, ischemic injury, and autoimmune disorders, with minimized side effects compared to existing therapies.

TECHNOLOGY KEY FEATURES

Small molecular weight (300–500 Da), multi-target cytokine inhibition, synthetic flexibility for formulation, broad-spectrum anti-inflammatory potential, safer profiles for chronic use, effective against multiple inflammatory pathways.

[Read more here](#)

MARKET ANALYSIS

The global anti-inflammatory therapeutics market is expected to reach \$191.42 billion by 2033, growing at a CAGR of 5.9%, fueled by rising autoimmune diseases and demand for safer drugs. [Source: Precedence Research, 2024]

Target Industries

Pharmaceutical Drug Discovery, Biopharma Contract Research, Chronic Disease Therapy Development, Active pharmaceutical ingredient (API) developers, clinical-stage biotech R&D, precision drug formulation firms.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Technology is available for licensing/ co-development.

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