



PENDING

(IN202311075941)

## A pancreatic lipase inhibitor comprising chromone-3-acrylic acid ester analogues and method of preparing the same

### NEED

Obesity contributes to over 5 million deaths annually due to related diseases. Current lipase inhibitors cause gastrointestinal distress or lose effectiveness with time. What if fat absorption could be slowed without disrupting digestion or causing side effects?

### TECHNOLOGY OVERVIEW

This invention presents novel chromone-3-acrylic acid ester analogues that inhibit pancreatic lipase—the key enzyme responsible for fat absorption. These analogues target fat breakdown at the molecular level, offering a new pathway for obesity control without known adverse effects.

### TECHNOLOGY KEY FEATURES

Novel chromone-3-acrylic acid scaffold, enzyme-specific inhibition, wide substituent variety, synthesis at room temperature, reduced fat hydrolysis, minimal gastrointestinal interference, and potential for oral formulation and combination therapy.

[Read more here](#)

### MARKET ANALYSIS

The global anti-obesity drug market is projected to reach \$38.5B by 2033, growing at 17.1% CAGR. India's obesity rate is projected to rise to 30.5% by 2030. Innovation in safer, targeted treatments is driving new drug pipelines. [Sources: Precedence Research 2024, WHO, ICMR-NCDIR]

### Target Industries

Pharmaceutical R&D firms: For novel anti-obesity therapeutics. Nutraceutical innovators: For fat-blocking functional formulations. Bioscience labs: For enzymatic assay development and metabolic pathway modeling.

### 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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