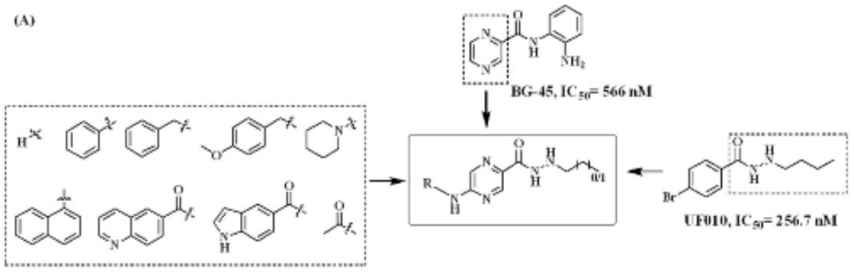
BITS Pilani
Pilani | Dubai | Goa | Hyderabad | Mumbai
An Institution of Eminence

विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY
सत्यमेव जयते

BITS Pilani
TECHNOLOGY
ENABLING
CENTRE
DST Supported

PENDING

(IN202311011366) Histone deacetylase isoform 3 (HDAC3) enzyme inhibiting compounds and methods of synthesizing the same



NEED

Histone deacetylase isoform 3 (HDAC3) plays a key role in cancer progression. Current treatments do not selectively target HDAC3, limiting their efficacy. This new compound offers a potential breakthrough in cancer therapy.

MARKET ANALYSIS

The global cancer therapeutics market is growing at a CAGR of 8.4%, projected to reach $300 billion by 2033. Key drivers include increased cancer incidence and demand for targeted therapies.

TECHNOLOGY OVERVIEW

The patent introduces a selective HDAC3 enzyme inhibitor based on a pyrazino hydrazide scaffold. This compound shows promising anti-cancer effects with high enzyme inhibition, offering a targeted therapeutic option for cancer treatment.

Target Industries

Pharmaceuticals, Biotechnology, Healthcare. , Pharmaceutical manufacturers, biotech research firms, healthcare providers focusing on oncology, and institutions involved in targeted cancer therapy research and development.

TECHNOLOGY KEY FEATURES

Selective inhibition of HDAC3, high IC50 value of 14 nM, effective against cancer, innovative pyrazino hydrazide scaffold, selective targeting without affecting other HDAC isoforms, efficient synthesis method.

AT A GLANCE

- SDG 3 (Good Health and Well-Being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 10 (Reduced Inequalities)

Read more here

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,
BITS Pilani Contact Details: tec.bits@pilani.bits-pilani.ac.in, 91 1596-255913

innovate achieve lead