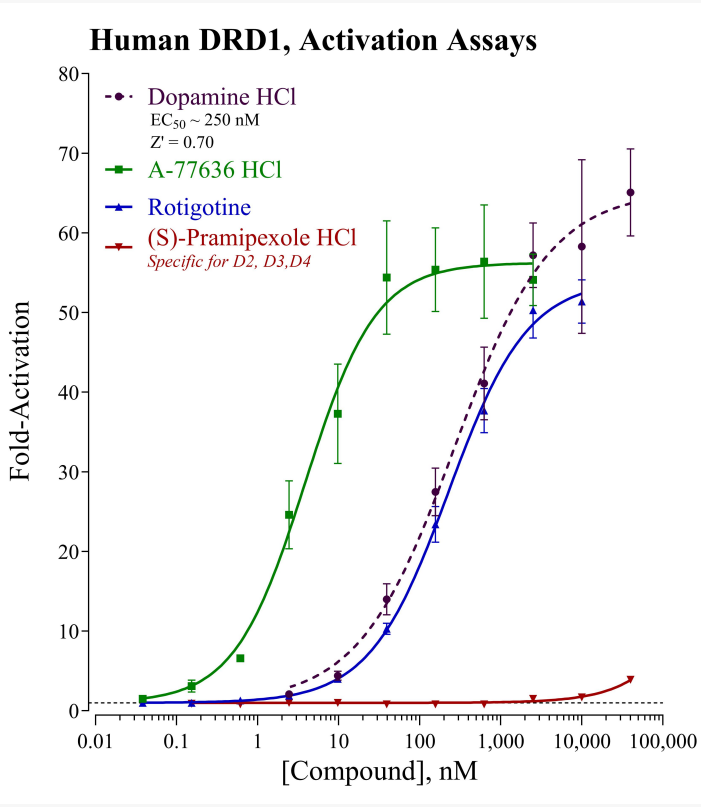
INDIGO Biosciences Launches Dopamine Receptor D1 Reporter Assay for Neurological and Psychiatric Research

New Cell-Based Assay Supports Drug Discovery for DRD1-Targeted Therapies



DRD1 Activation Graph

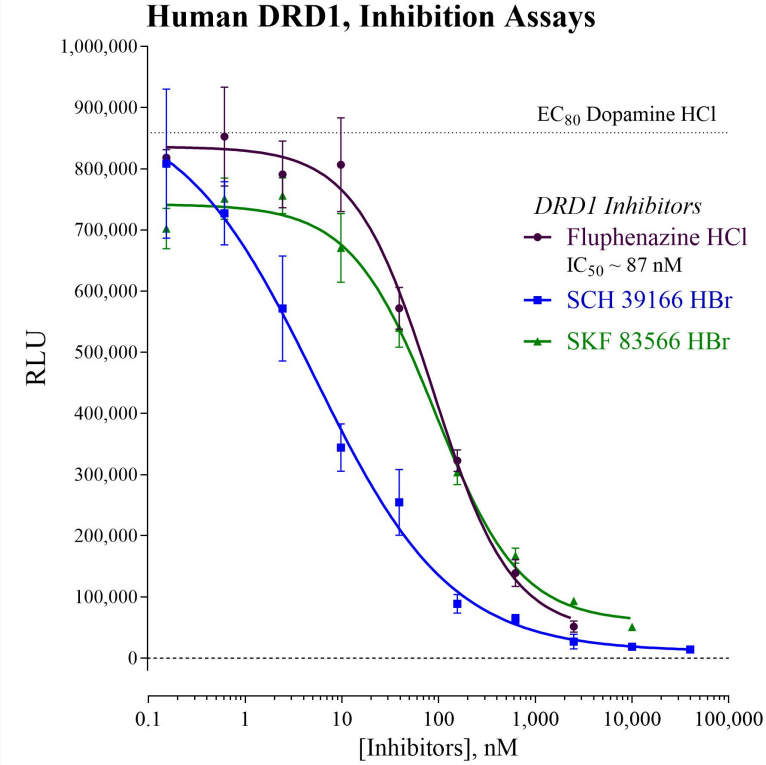
STATE COLLEGE, PA, UNITED STATES, March 11, 2025 /EINPresswire.com/ -- INDIGO Biosciences, a premier provider of cell-based assay solutions, has introduced its Human Dopamine Receptor D1 (DRD1) Reporter Assay. This innovative assay provides researchers with a robust platform to study DRD1 signaling pathways, accelerating the development of therapies for neurological and psychiatric disorders, including Parkinson's disease, schizophrenia, ADHD, and substance use disorders.

"The dopamine receptor D1 is a crucial regulator of cognitive function, motor control, and motivation, making it a key target for therapeutic intervention in a range of neurological conditions," said Dr. Jack Vanden Heuvel, Chief Scientific Officer at INDIGO Biosciences. "Our new DRD1 Reporter Assay enables researchers to evaluate drug compounds with unmatched efficiency, advancing the discovery of treatments for conditions driven by DRD1 dysregulation."

Dopamine receptor D1 (DRD1) is a critical GPCR that mediates neurotransmission by activating adenylyl cyclase and increasing intracellular cyclic AMP (cAMP). Dysregulated DRD1 signaling has been implicated in Parkinson's disease, schizophrenia, ADHD, and addiction. INDIGO's DRD1 Reporter Assays offer researchers a comprehensive solution for investigating how potential drug candidates modulate DRD1 activity, providing key insights into therapeutic mechanisms.

"Our team is committed to equipping scientists with tools that simplify research workflows while

delivering reliable, high-quality data," added Dr. Vanden Heuvel. "The DRD1 Reporter Assay complements our existing portfolio of neurotransmitter receptor assays such as the Oxytocin Receptor (OXTR) and Tropomyosin receptor kinases A (TrkA), and supports researchers in their efforts to develop novel treatments for neuropsychiatric and neurological disorders."



DRD1 Inhibition Graph

INDIGO's DRD1 Reporter Assay kits come complete with all materials needed to perform the assay, including cryopreserved optimized reporter cells, media for recovering the cryopreserved cells and diluting test samples, a reference compound, luciferase detection reagent, a cell culture-ready assay plate, and a detailed protocol. By providing all necessary reagents in a single, easy-to-use kit, INDIGO enables researchers to generate high-quality data quickly and efficiently, without the need for labor-intensive cell culture work or assay optimization.

What sets INDIGO's assay kits apart is our proprietary CryoMite™ cryo-preservation process. This innovative technology eliminates the need for weeks of cell culture work, allowing researchers to immediately dispense healthy, division-competent reporter cells into assay-ready plates. The process streamlines the workflow, requiring no intermediate steps such as cell rinsing, viability checks, or titer adjustments. Researchers simply thaw the cells, plate them, add test compounds and detection reagents, and obtain results in as little as 24 hours.

INDIGO's Human Dopamine Receptor D1 Assay is available as an all-inclusive kit in 96-well and 3x32-well formats. Additionally, bulk volumes of assay reagents are available to accommodate high-throughput screening needs.

Researchers can also utilize INDIGO's assay services for the convenient and cost-effective outsourcing of their DRD1-related studies, ensuring access to high-quality data without the need for extensive in-house resources.

For more information about INDIGO's Dopamine Receptor D1 Reporter Assay and other products and services, visit www.indigobiosciences.com.

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