

Resource Summary Report

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NIMH Psychoactive Drug Screening Program

RRID:SCR_005630

Type: Tool

Proper Citation

NIMH Psychoactive Drug Screening Program (RRID:SCR_005630)

Resource Information

URL: <http://pdsp.med.unc.edu/>

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Description: This service provides screening of novel psychoactive compounds for pharmacological and functional activity at cloned human or rodent CNS receptors, channels, and transporters. Bryan Roth MD, PhD (University of North Carolina Chapel Hill) will perform pharmacological and functional screening of novel compounds as a contractor to NIMH. Screening of compounds is provided to qualified academic investigators at no cost. * Assays using for a large number of cloned human or rodent cDNAs for CNS receptors, channels and transporters. For a list of current receptors/transporters go to:clones.html * Ki determinations * Functional assays to determine effects on second messenger systems, channel activity and transporter function * Cloned receptors are also available at no cost to qualified investigators. * Assays are now available for bioavailability predictions (CaCo2, MDR-1) and cardiovascular toxicity predictions (HERG, 5-HT2B) Who is eligible * Academic investigators involved in basic or clinical research relevant to mental health. * Projects from research and development areas in small businesses relevant to mental and behavioral science. * Areas of interest to NIMH include the design and development of new chemical entities and small molecules as research tools, probes, targeted drug delivery systems, and PET ligands for brain imaging. * Research areas of interest are described in the Division of Basic and Clinical Neuroscience Research webpage, <http://www.nimh.nih.gov/about/organization/dnbbs/index.shtml>.

Abbreviations: PDSD, NIMH PDSP

Synonyms: National Institute of Mental Health Psychoactive Drug Screening Program

Resource Type: analysis service resource, service resource, production service resource, material analysis service

Funding: NIMH contract HHSN-271-2008-00025-C

Resource Name: NIMH Psychoactive Drug Screening Program

Resource ID: SCR_005630

Alternate IDs: nlx_146244

Record Creation Time: 20220129T080231+0000

Record Last Update: 20260731T042713+0000

Ratings and Alerts

No rating or validation information has been found for NIMH Psychoactive Drug Screening Program.

No alerts have been found for NIMH Psychoactive Drug Screening Program.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 75 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Rouaud A, et al. (2024) Microdosing psychedelics and the risk of cardiac fibrosis and valvulopathy: Comparison to known cardiotoxins. Journal of psychopharmacology (Oxford, England), 38(3), 217.

Havel V, et al. (2024) Oxa-Iboga alkaloids lack cardiac risk and disrupt opioid use in animal models. Nature communications, 15(1), 8118.

Giri R, et al. (2023) Structure-Activity Relationship Studies on 6-Chloro-1-phenylbenzazepines Leads to the Identification of a New Dopamine D1 Receptor Antagonist. Molecules (Basel, Switzerland), 28(16).

Mehr-Un-Nisa , et al. (2021) C-terminal modified Enkephalin-like tetrapeptides with enhanced affinities at the kappa opioid receptor and monoamine transporters. Bioorganic & medicinal chemistry, 51, 116509.

Kaur S, et al. (2021) Estrogen exacerbates the nociceptive effects of peripheral serotonin on rat trigeminal sensory neurons. Neurobiology of pain (Cambridge, Mass.), 10, 100073.

Karki A, et al. (2020) Structural manipulation of aporphines via C10 nitrogenation leads to the identification of new 5-HT7AR ligands. Bioorganic & medicinal chemistry, 28(15), 115578.

Aguiar JP, et al. (2020) The association between receptor binding affinity and metabolic side effect profile of antipsychotics and major cardio- and cerebrovascular events: A case/non-case study using VigiBase. European neuropsychopharmacology : the journal of

the European College of Neuropsychopharmacology, 35, 30.

Pal RK, et al. (2019) Inclusion of enclosed hydration effects in the binding free energy estimation of dopamine D3 receptor complexes. *PLoS one*, 14(9), e0222902.

Iyamu ID, et al. (2019) Discovery of a novel class of potent and selective tetrahydroindazole-based sigma-1 receptor ligands. *Bioorganic & medicinal chemistry*, 27(9), 1824.

Tseuguem PP, et al. (2019) Aqueous and methanol extracts of *Paullinia pinnata* L. (Sapindaceae) improve inflammation, pain and histological features in CFA-induced mono-arthritis: Evidence from in vivo and in vitro studies. *Journal of ethnopharmacology*, 236, 183.

Dutta AK, et al. (2019) D-578, an orally active triple monoamine reuptake inhibitor, displays antidepressant and anti-PTSD like effects in rats. *European journal of pharmacology*, 862, 172632.

Moy SS, et al. (2019) Prosocial effects of an oxytocin metabolite, but not synthetic oxytocin receptor agonists, in a mouse model of autism. *Neuropharmacology*, 144, 301.

Wang T, et al. (2018) A Computational Systems Pharmacology Approach to Investigate Molecular Mechanisms of Herbal Formula Tian-Ma-Gou-Teng-Yin for Treatment of Alzheimer's Disease. *Frontiers in pharmacology*, 9, 668.

Remesic M, et al. (2018) Cyclic biphalin analogues with a novel linker lead to potent agonist activities at mu, delta, and kappa opioid receptors. *Bioorganic & medicinal chemistry*, 26(12), 3664.

Harris AC, et al. (2018) Effects of nicotine-containing and "nicotine-free" e-cigarette refill liquids on intracranial self-stimulation in rats. *Drug and alcohol dependence*, 185, 1.

Zamberlan F, et al. (2018) The Varieties of the Psychedelic Experience: A Preliminary Study of the Association Between the Reported Subjective Effects and the Binding Affinity Profiles of Substituted Phenethylamines and Tryptamines. *Frontiers in integrative neuroscience*, 12, 54.

Chan JD, et al. (2017) The anthelmintic praziquantel is a human serotonergic G-protein-coupled receptor ligand. *Nature communications*, 8(1), 1910.

Ibrahim MA, et al. (2017) Marine Inspired 2-(5-Halo-1H-indol-3-yl)-N,N-dimethylethanamines as Modulators of Serotonin Receptors: An Example Illustrating the Power of Bromine as Part of the Uniquely Marine Chemical Space. *Marine drugs*, 15(8).

Tabakoff B, et al. (2016) A novel substituted aminoquinoline selectively targets voltage-sensitive sodium channel isoforms and NMDA receptor subtypes and alleviates chronic inflammatory and neuropathic pain. *European journal of pharmacology*, 784, 1.

Zhang HK, et al. (2016) Synthesis and biological evaluation of novel hybrids of highly potent and selective $\alpha 4 \beta 2$ -Nicotinic acetylcholine receptor (nAChR) partial agonists. *European journal of medicinal chemistry*, 124, 689.