Resource Summary Report

Generated by ASWG on Apr 30, 2025

Kinetics for Drug Discovery

RRID:SCR_003868
Type: Tool

Proper Citation

Kinetics for Drug Discovery (RRID:SCR_003868)

Resource Information

URL: http://www.k4dd.eu/

Proper Citation: Kinetics for Drug Discovery (RRID:SCR_003868)

Description: Project whose goal is to improve understanding of how potential drugs bind with their target, and develop methods and tools to allow researchers to study drug-target interactions with greater ease. These tools would help researchers to determine whether a drug candidate is likely to be safe and effective much earlier in the drug development process. The first goal of the team is to enhance understanding of binding kinetics; exactly how do small molecules interact with their targets? Ultimately, the project aims to develop a range of robust techniques, methods and models that could be easily incorporated into the drug development pathway and enable scientists and drug designers worldwide to reliably predict a molecule's kinetic properties (its "kinotype"). This information will allow drug developers to more easily determine the safety and efficacy of a molecule and will weed out ineffective or unsafe molecules earlier in the drug development process. Eventually, the project also hopes to raise awareness of the importance of considering the kinetic aspects of drug-target interactions throughout drug development.

Abbreviations: K4DD

Resource Type: organization portal, data or information resource, consortium, portal

Keywords: drug-target interaction, drug, drug development, tool development, binding kinetics, small molecule, target, kinotype, kinetics, bind

Funding: Innovative Medicines Initiative 115366;
EFPIA

Resource Name: Kinetics for Drug Discovery

Resource ID: SCR_003868

Alternate IDs: nlx_158193

Record Creation Time: 20220129T080221+0000

Record Last Update: 20250430T055245+0000

Ratings and Alerts

No rating or validation information has been found for Kinetics for Drug Discovery.

No alerts have been found for Kinetics for Drug Discovery.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at ASWG.

Vendel E, et al. (2020) A 3D brain unit model to further improve prediction of local drug distribution within the brain. PloS one, 15(9), e0238397.

Rucktooa P, et al. (2018) Towards high throughput GPCR crystallography: In Meso soaking of Adenosine A2A Receptor crystals. Scientific reports, 8(1), 41.

Guo D, et al. (2018) A two-state model for the kinetics of competitive radioligand binding. British journal of pharmacology, 175(10), 1719.