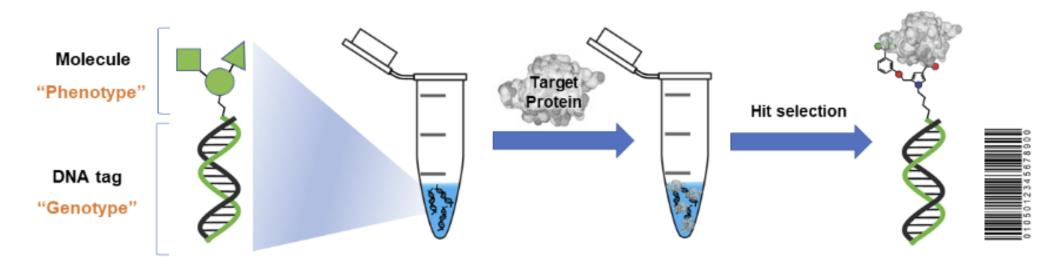


Methods in Drug Development

DNA encoded libraries

Principle

The Principle of DNA-Encoded Chemical Libraries



Concept

Single molecule identified by a unique barcode

DNA-Encoding Library (in a tube)

Efficient and inexpensive screening of billions of compounds

Hit Identification

DNA barcode allows the identification of preferential ligands

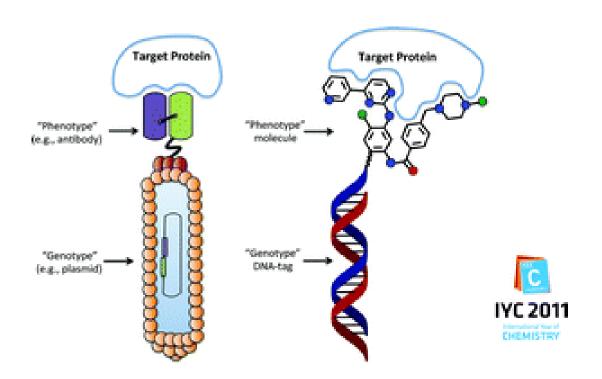
Motivation / expectation



Conventional HTS platform

- Smaller infrastructure (and cost)
- Larger libraries (> 10⁹
 versus 1-2 million)

History



- Inspired by phage display
- Applied to small molecule drug development
- Brenner & Lerner, PNAS 1992