BioSolveIT

expect actives!

Evaluating C-S-D with mini REAL Space

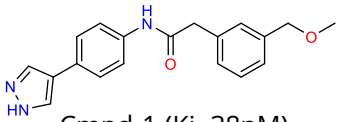
2025-12-18

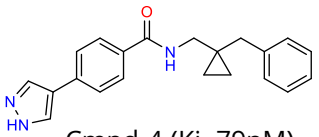
ROCK1

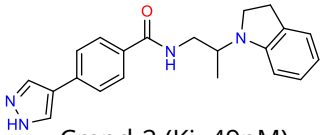
Step-by-step

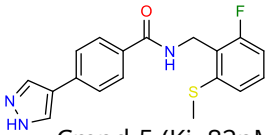
- Load 5kkt
- Extract ligand 6U2_A_501
- Sphere constraints:
  - Donor (1.0Å) on N29 of ligand
  - Acceptor (1.0Å) on N36 of ligand
  - Both optional, 1 need to fit
- Start C-S-D with miniREAL_100k_2025-12
- Anchoring: 5 poses each + sphere constraints activated
- Sort by HYDE score, filter* and select top 500 synthons
- Extension-1: 5 poses each
- Sort by HYDE score, filter* and select top 500
- Extension-2: 5 poses each
- Sot by HYDE score, filter* and select top 500

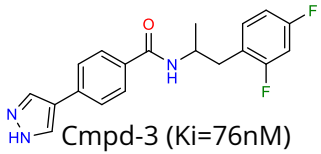
ROCK1 actives included in mini REAL

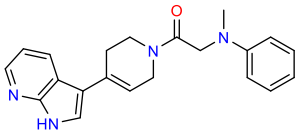

Cmpd-1 (Ki=38nM)


Cmpd-4 (Ki=79nM)


Cmpd-2 (Ki=49nM)


Cmpd-5 (Ki=82nM)


Cmpd-3 (Ki=76nM)


Cmpd-22 (Ki=97nM)

from Beroza et al. 2022

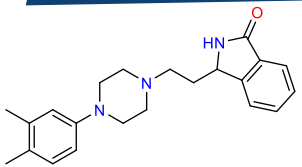
*no red traffic lights; min 1 ring

DRD4

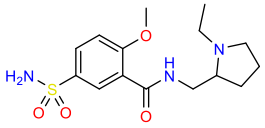
Step-by-step

- Load 5WIU
- Extract ligand AQD_A_1201
- Sphere constraints:
  - Donor interaction contact (1.0Å) on Asp_A_115 sidechain O
  - Hydrophobic (3.0Å) on CAV of ligand
  - Exclude Linker constraint (4.5Å) on CAV of ligand
- Start C-S-D with miniREAL_100k_2025-12
- Anchoring: 5 poses each + sphere constraints activated
- Sort by HYDE score, filter* and select top 500 synthons
- Extension-1: 5 poses each
- Sort by HYDE score, filter* and select top 500 synthons
- Extension-2: 5 poses each
- Sort by HYDE score, filter* and select top 500 synthons

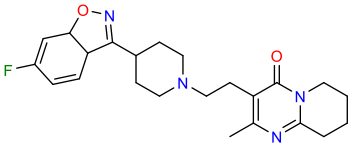
DRD4 antagonists included in miniREAL



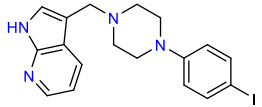
PD-168568 (Ki=8.8nM)



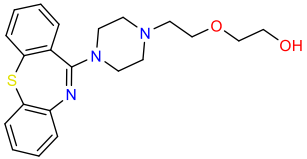
Sulpiride (Ki=2µM)



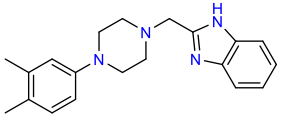
Risperidone (Ki=7.3nM)



L-750,667 (KI=0.51nM)



Quetiapine (Ki=2µM)



A-381393 (Ki=1.5nM)

*no red traffic lights