

Additional file 4:

Supplemental Data - VLS hitlists and Compound Structures and Properties
>300,000 compounds were screened against 3 models of the *Plasmodium* aldolase-TRAP complex. The following tables list the final sets of compounds obtained for each receptor:

The table headings are defined as follows:

- Compound #: a unique number (1-60) assigned to each compound
- VLS score: the lowest energy score obtained for each compound after 3 rounds of screening against the receptor model
- Docking score: the energy score obtained for each compound when it was re-docking to its receptor using a slower, more robust docking algorithm
- Score difference: (Docking score) – (VLS score)
- RMSD: root-mean-squared deviation of the docked position and conformation of the compound between the VLS and re-docking runs

VLS hits for “2pc4 model”

Compound #	VLS Score	Docking Score	Score Difference	RMSD (Å)
4	-37.50	-36.92	0.58	0.08
40	-34.07	-37.10	-3.03	0.00
44	-43.32	-43.28	0.05	0.00
45	-46.36	-36.59	9.77	1.98
47	-36.64	-37.11	-0.47	2.14
56	-32.92	-32.18	0.75	1.73

VLS hits for “falciparum model”

Compound #	VLS Score	Docking Score	Score Difference	RMSD (Å)
3	-36.51	-36.50	0.01	0.00
5	-33.66	-33.42	0.24	0.75
15	-36.22	-33.04	3.18	0.21
22	-33.63	-35.83	-2.20	0.05
32	-37.62	-34.41	3.21	0.48
37	-34.12	-33.16	0.96	0.09
40	-33.30	-36.58	-3.28	0.08
43	-32.39	-32.34	0.06	0.02
46	-32.55	-32.56	-0.01	0.00
53	-32.21	-32.23	-0.03	0.01
55	-37.23	-37.01	0.22	0.10

VLS hits for “gapped-pocket model”

Compound #	VLS Score	Docking Score	Score Difference	RMSD (Å)
1	-32.43	-33.19	-0.76	0.03
2	-36.41	-42.87	-6.47	0.07
5	-36.46	-36.53	-0.06	0.75
6	-37.08	-36.52	0.56	0.03
7	-35.10	-35.59	-0.49	0.05
8	-33.05	-33.11	-0.06	0.03
9	-36.10	-33.41	2.69	0.17
10	-35.37	-35.32	0.05	1.87
11	-32.71	-32.41	0.30	1.70
12	-35.11	-32.30	2.81	2.72
13	-33.02	-34.97	-1.95	2.12
14	-35.00	-34.46	0.54	0.01
16	-35.12	-34.91	0.21	0.00
17	-34.25	-34.32	-0.07	0.02
18	-35.05	-34.92	0.13	0.00
19	-34.49	-34.12	0.37	0.00
20	-34.78	-32.09	2.69	2.22
21	-35.30	-35.28	0.02	0.03
23	-37.96	-43.33	-5.37	0.09
24	-32.67	-32.79	-0.11	0.03
25	-32.61	-32.44	0.17	0.01
26	-37.45	-37.65	-0.20	0.00
27	-35.54	-41.36	-5.83	0.05
28	-34.21	-33.17	1.03	2.21
29	-35.18	-42.15	-6.97	2.27
30	-33.65	-33.36	0.30	1.81
31	-34.27	-33.76	0.51	0.02
33	-39.25	-38.68	0.57	0.03
34	-36.53	-36.82	-0.29	0.00
35	-32.47	-33.42	-0.95	1.81
36	-33.16	-32.87	0.29	0.01
38	-35.19	-35.18	0.01	0.00
39	-38.55	-37.22	1.34	0.04
41	-38.86	-38.45	0.41	0.00
42	-34.08	-34.01	0.08	0.00
48	-32.34	-33.15	-0.81	4.14
49	-37.85	-37.39	0.46	0.03
50	-32.98	-36.85	-3.87	0.68
51	-37.08	-37.01	0.08	0.03
52	-38.58	-37.99	0.60	6.84
54	-35.14	-41.21	-6.06	0.09
57	-35.55	-35.89	-0.34	0.00
58	-33.41	-33.16	0.25	1.66

Compound #	VLS Score	Docking Score	Score Difference	RMSD (Å)
59	-32.74	-32.69	0.05	2.26
60	-34.63	-32.09	2.53	0.02

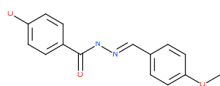
Compound Structures & Properties

The compounds in the ChemBridge (San Diego, CA) screening library are generally uncharacterized. However, several physical and chemical features including solubility, hydrophobicity, flexibility, polarity, etc., can be predicted based on the compounds' formula and molecular structure. These features are listed below for each of the final 60 VLS hits.

Compound # 1

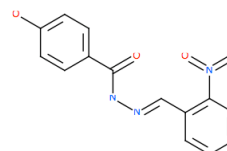
Chembridge ID 5112957

MW 270.3
Formula C₁₅ H₁₄ N₂ O₃
Name 4-hydroxy-N'-(4-methoxybenzylidene) benzohydrazide
LogSW -2.453
RB 3
tPSA 70.92
hDon 2
hAcc 4
cLogP 2.18
molLogP 3.01264
SMILES C(C=C(O)C=C1)=C1C(=O)N/N=C/C(C=CC(=C1)OC)=C1

**Compound # 2**

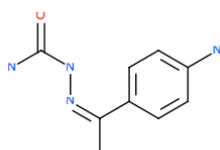
Chembridge ID 5112979

MW 285.3
Formula C₁₄ H₁₁ N₃ O₄
Name 4-hydroxy-N'-(2-nitrobenzylidene) benzohydrazide
LogSW -2.799
RB 3
tPSA 104.83
hDon 2
hAcc 5
cLogP 2
molLogP 2.47206
SMILES O=N(=O)C(C=CC=C1)=C1/C=N/NC(=O)C(C=CC(O)=C1)=C1

**Compound # 3**

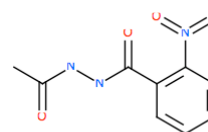
Chembridge ID 5121901

MW 192.2
Formula C₉ H₁₂ N₄ O
Name 1-(4-aminophenyl)-1-ethanone semicarbazone
LogSW -1.833
RB 2
tPSA 93.5
hDon 3
hAcc 2
cLogP 1.44
molLogP .889302
SMILES C(C=C(N)C=C1)=C1/C(=N)NC(=O)N)C

**Compound # 4**

Chembridge ID 5153389

MW 223.2
Formula C₉ H₉ N₃ O₄
Name N'-acetyl-2-nitrobenzohydrazide
LogSW -2.179
RB 2
tPSA 101.34
hDon 2
hAcc 4
cLogP -.41
molLogP .041457
SMILES O=N(=O)C(C=CC=C1)=C1C(=O)NNC(=O)C



MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

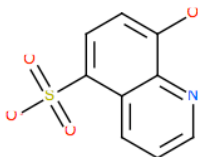
hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 5

Chembridge ID 5153799

MW 225.2
Formula C₉ H₇ N O₄ S
Name 8-hydroxy-5-quinolinesulfonic acid

LogSW .343
RB 1
tPSA 87.49
hDon 2
hAcc 5
cLogP -.71



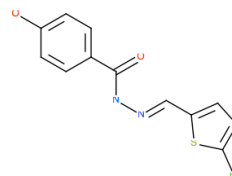
molLogP .616233
SMILES C(C1)=C(C2C(C=1O)=NC=CC=2)S(=O)(=O)[O-]

Compound # 6

Chembridge ID 5227275

MW 325.2
Formula C₁₂ H₉ Br N₂ O₂ S
Name N'-[(5-bromo-2-thienyl)methylene]-4-hydroxybenzohydrazide

LogSW -3.391
RB 3
tPSA 61.69
hDon 2
hAcc 3
cLogP 2.81



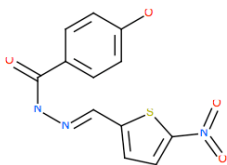
molLogP 3.62692
SMILES C(C=C(S1)/C=N/NC(=O)C(C=CC(=C2)O)=C2)=C1[Br]

Compound # 7

Chembridge ID 5227278

MW 291.3
Formula C₁₂ H₉ N₃ O₄ S
Name 4-hydroxy-N'-[(5-nitro-2-thienyl)methylene]benzohydrazide

LogSW -2.62
RB 3
tPSA 104.83
hDon 2
hAcc 5
cLogP 1.74



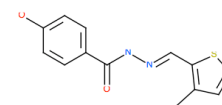
molLogP 2.75402
SMILES C(C=C(S1)/C=N/NC(=O)C(C=CC(=C2)O)=C2)=C1N(=O)=O

Compound # 8

Chembridge ID 5227280

MW 260.3
Formula C₁₃ H₁₂ N₂ O₂ S
Name 4-hydroxy-N'-[(3-methyl-2-thienyl)methylene]benzohydrazide

LogSW -2.569
RB 3
tPSA 61.69
hDon 2
hAcc 3
cLogP 2.4



molLogP 3.07727
SMILES C(=N/NC(=O)C(C=CC(O)=C1)=C1)/C(SC=C1)=C1C

MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

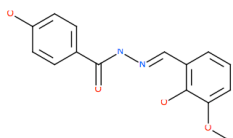
Compound # 9

Chembridge ID 5227289

MW 286.3
Formula C₁₅ H₁₄ N₂ O₄
Name 4-hydroxy-N'-(2-hydroxy-3-methoxybenzylidene)benzohydrazide

LogSW -1.938**RB** 3**tPSA** 91.15**hDon** 3**hAcc** 5**cLogP** 1.44**molLogP** 2.51318

SMILES C(=N/NC(=O)C(C=CC(O)=C1)=C1)/C(C=CC1)=C(C=1OC)O

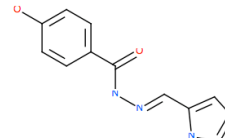
**Compound # 10**

Chembridge ID 5227292

MW 229.2
Formula C₁₂ H₁₁ N₃ O₂
Name 4-hydroxy-N'-(1H-pyrrol-2-ylmethylene)benzohydrazide

LogSW -1.027**RB** 3**tPSA** 77.48**hDon** 3**hAcc** 3**cLogP** .86**molLogP** 1.87264

SMILES N(C=CC1)C=1/C=N/NC(=O)C(C=CC(=C1)O)=C1

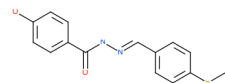
**Compound # 11**

Chembridge ID 5227298

MW 286.4
Formula C₁₅ H₁₄ N₂ O₂ S
Name 4-hydroxy-N'-[4-(methylthio)benzylidene]benzohydrazide

LogSW -3.117**RB** 3**tPSA** 61.69**hDon** 2**hAcc** 3**cLogP** 2.82**molLogP** 3.60632

SMILES C(C=C(O)C=C1)=C1C(=O)N/N=C/C(C=CC(=C1)SC)=C1

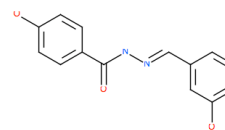
**Compound # 12**

Chembridge ID 5227303

MW 256.3
Formula C₁₄ H₁₂ N₂ O₃
Name 4-hydroxy-N'-(3-hydroxybenzylidene)benzohydrazide

LogSW -1.847**RB** 3**tPSA** 81.92**hDon** 3**hAcc** 4**cLogP** 1.59**molLogP** 2.66317

SMILES C(C=C(O)C=C1)=C1C(=O)N/N=C/C(C=CC(=C1)O)=C1



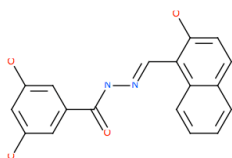
MW: molecular weight, g/mol	hDon: # of hydrogen-bond donors
LogSW: predicted aqueous solubility	hAcc: # of hydrogen-bond acceptors
RB: # of rotatable bonds	cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
tPSA: total polar surface area (Angstroms ²)	molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
	SMILES: Simplified Molecular Input Line Entry Specification

Compound # 13

Chembridge ID 5227326

MW 322.3
Formula C₁₈ H₁₄ N₂ O₄
Name 3,5-dihydroxy-N'-[(2-hydroxy-1-naphthyl)methylene]benzohydrazide

LogSW -2.849
RB 3
tPSA 102.15
hDon 4
hAcc 5
cLogP 2.2

**molLogP** 3.61119

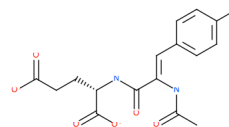
SMILES O=C(O)C(O)=C1=C(O)N/N=C/C(O)=CC1=C2C=1C=CC=C2

Compound # 14

Chembridge ID 5252622

MW 352.3
Formula C₁₆ H₁₇ F N₂ O₆
Name N-[2-(acetylamino)-3-(4-fluorophenyl)acryloyl]glutamic acid

LogSW -3.028
RB 8
tPSA 132.8
hDon 4
hAcc 6
cLogP -0.6

**molLogP** .451621

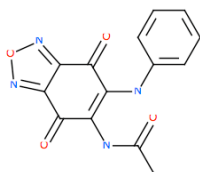
SMILES C(/C(C=CC(F)=C1)=C1)=C(/C(=O)N[C@H](C(=O)[O-])CCC(=O)[O-])NC(=O)C

Compound # 15

Chembridge ID 5256251

MW 298.3
Formula C₁₄ H₁₀ N₄ O₄
Name N-(6-anilino-4,7-dioxo-4,7-dihydro-2,1,3-benzoxadiazol-5-yl)acetamide

LogSW -2.17
RB 3
tPSA 114.19
hDon 2
hAcc 6
cLogP .93

**molLogP** .926853

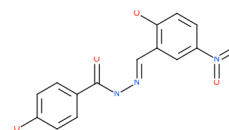
SMILES O=C(C(=NON1)C=1C(=O)C1NC(C=CC=C2)=C2)C=1NC(=O)C

Compound # 16

Chembridge ID 5256921

MW 301.3
Formula C₁₄ H₁₁ N₃ O₅
Name 4-hydroxy-N'-(2-hydroxy-5-nitrobenzylidene)benzohydrazide

LogSW -2.5
RB 3
tPSA 125.06
hDon 3
hAcc 6
cLogP 1.97

**molLogP** 2.21263

SMILES C(C(=C(O)C=C1)/C=N/NC(=O)C(C=CC(=C2)O)=C2)=C1N(=O)=O

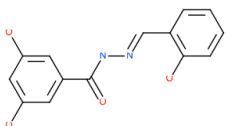
MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 17

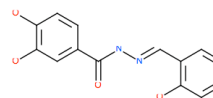
Chembridge ID 5264148

MW 272.3
Formula C₁₄ H₁₂ N₂ O₄
Name 3,5-dihydroxy-N'-(2-hydroxybenzylidene)benzohydrazide
LogSW -1.486
RB 3
tPSA 102.15
hDon 4
hAcc 5
cLogP 1.03
molLogP 2.28373
SMILES C(C(O)=CC(O)=C1)=C1C(=O)N/N=C/C(C=CC=C1)=C1O

**Compound # 18**

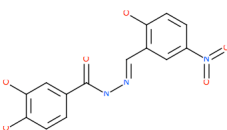
Chembridge ID 5266986

MW 272.3
Formula C₁₄ H₁₂ N₂ O₄
Name 3,4-dihydroxy-N'-(2-hydroxybenzylidene)benzohydrazide
LogSW -1.545
RB 3
tPSA 102.15
hDon 4
hAcc 5
cLogP 1.1
molLogP 2.16371
SMILES C(C(O)=C(O)C=C1)=C1C(=O)N/N=C/C(C=CC=C1)=C1O

**Compound # 19**

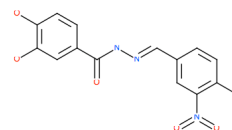
Chembridge ID 5267209

MW 317.3
Formula C₁₄ H₁₁ N₃ O₆
Name 3,4-dihydroxy-N'-(2-hydroxy-5-nitrobenzylidene)benzohydrazide
LogSW -2.189
RB 3
tPSA 145.29
hDon 4
hAcc 7
cLogP 1.47
molLogP 1.83319
SMILES C(C(=C(O)C=C1)/C=N/NC(=O)C(C=CC(=C2O)O)=C2)=C1N(=O)=O

**Compound # 20**

Chembridge ID 5267603

MW 335.7
Formula C₁₄ H₁₀ Cl N₃ O₅
Name N'-(4-chloro-3-nitrobenzylidene)-3,4-dihydroxybenzohydrazide
LogSW -3.183
RB 3
tPSA 125.06
hDon 3
hAcc 6
cLogP 2.02
molLogP 2.80693
SMILES C(C(O)=C(C=C1)O)=C1C(=O)N/N=C/C(C=CC([Cl])=C1N(=O)=O)=C1



MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

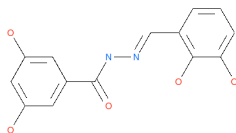
Compound # 21

Chembridge ID 5280090

MW 288.3
Formula C₁₄ H₁₂ N₂ O₅
Name N'-(2,3-dihydroxybenzylidene)-3,5-dihydroxybenzohydrazide

LogSW -1.09**RB** 3**tPSA** 122.38**hDon** 5**hAcc** 6**cLogP** 0.43**molLogP** 1.90429

SMILES C(C(O)=CC(O)=C1)=C1C(=O)N/N=C/C(C=CC1)=C(C=1O)O

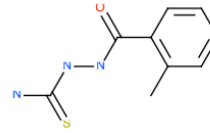
**Compound # 22**

Chembridge ID 5302171

MW 209.3
Formula C₉ H₁₁ N₃ O S
Name 2-(2-methylbenzoyl)hydrazinecarbothioamide

LogSW -2.786**RB** 2**tPSA** 67.15**hDon** 3**hAcc** 1**cLogP** 2.41**molLogP** .739915

SMILES S=C(N)NNC(=O)C(C=CC=C1)=C1C

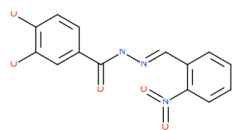
**Compound # 23**

Chembridge ID 5312165

MW 301.3
Formula C₁₄ H₁₁ N₃ O₅
Name 3,4-dihydroxy-N'-(2-nitrobenzylidene)benzohydrazide

LogSW -2.497**RB** 3**tPSA** 125.06**hDon** 3**hAcc** 6**cLogP** 1.51**molLogP** 2.09262

SMILES C(C(O)=C(O)C=C1)=C1C(=O)N/N=C/C(C=CC1)=C1N(=O)=O

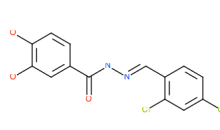
**Compound # 24**

Chembridge ID 5315106

MW 325.2
Formula C₁₄ H₁₀ Cl₂ N₂ O₃
Name N'-(2,4-dichlorobenzylidene)-3,4-dihydroxybenzohydrazide

LogSW -3.715**RB** 3**tPSA** 81.92**hDon** 3**hAcc** 4**cLogP** 3.19**molLogP** 3.85176

SMILES C(C(O)=C(C=C1)O)=C1C(=O)N/N=C/C(C=CC1)=C1N(Cl)=O



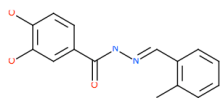
MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 25

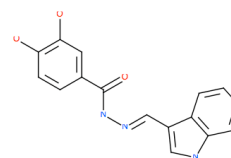
Chembridge ID 5316181

MW 270.3
Formula C₁₅ H₁₄ N₂ O₃
Name 3,4-dihydroxy-N'-(2-methylbenzylidene) benzohydrazide
LogSW -2.522
RB 3
tPSA 81.92
hDon 3
hAcc 4
cLogP 2.26
molLogP 2.82429
SMILES C(C(O)=C(O)C=C1)=C1C(=O)N/N=C/C(C=CC=C1)=C1C

**Compound # 26**

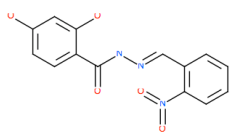
Chembridge ID 5318411

MW 295.3
Formula C₁₆ H₁₃ N₃ O₃
Name 3,4-dihydroxy-N'-(1H-indol-3-ylmethylene)benzohydrazide
LogSW -2.268
RB 3
tPSA 97.71
hDon 4
hAcc 4
cLogP 1.75
molLogP 2.76061
SMILES N(C(C=CC=C1)=C1C1/C=C/N/NC(=O)C(C=CC(O)=C2O)=C2)C=1

**Compound # 27**

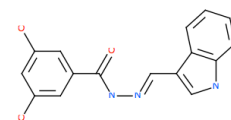
Chembridge ID 5320663

MW 301.3
Formula C₁₄ H₁₁ N₃ O₅
Name 2,4-dihydroxy-N'-(2-nitrobenzylidene) benzohydrazide
LogSW -3.248
RB 3
tPSA 125.06
hDon 3
hAcc 6
cLogP 2.39
molLogP 2.09262
SMILES C(C=C(O)C1)=C(C(=O)C(=O)N/N=C/C(C=CC=C1)=C1N(=O)=O

**Compound # 28**

Chembridge ID 5321784

MW 295.3
Formula C₁₆ H₁₃ N₃ O₃
Name 3,5-dihydroxy-N'-(1H-indol-3-ylmethylene)benzohydrazide
LogSW -2.209
RB 3
tPSA 97.71
hDon 4
hAcc 4
cLogP 1.68
molLogP 2.88063
SMILES N(C(C=CC=C1)=C1C1/C=C/N/NC(=O)C(C=C(O)C=C2O)=C2)C=1



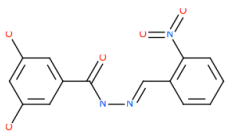
MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 29

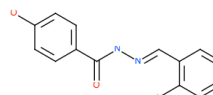
Chembridge ID 5322358

MW 301.3
Formula C₁₄ H₁₁ N₃ O₅
Name 3,5-dihydroxy-N'-(2-nitrobenzylidene) benzohydrazide
LogSW -2.437
RB 3
tPSA 125.06
hDon 3
hAcc 6
cLogP 1.44
molLogP 2.21263
SMILES O=N(=O)C(C=CC=C1)=C1/C=N/NC(=O)C(C=C(O)C=C1O)=C1

**Compound # 30**

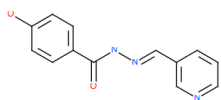
Chembridge ID 5331708

MW 258.3
Formula C₁₄ H₁₁ F N₂ O₂
Name N'-(2-fluorobenzylidene)-4-hydroxybenzohydrazide
LogSW -2.554
RB 3
tPSA 61.69
hDon 2
hAcc 3
cLogP 2.4
molLogP 3.07193
SMILES C(=N/NC(=O)C(C=CC(O)=C1)=C1)/C(C=CC=C1)=C1F

**Compound # 31**

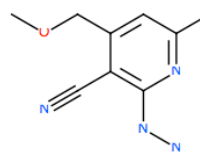
Chembridge ID 5336667

MW 241.2
Formula C₁₃ H₁₁ N₃ O₂
Name 4-hydroxy-N'-(3-pyridinylmethylene) benzohydrazide
LogSW .271
RB 3
tPSA 74.58
hDon 2
hAcc 4
cLogP .76
molLogP 1.87335
SMILES C(=N/NC(=O)C(C=CC(O)=C1)=C1)/C(C=CC=N1)=C1

**Compound # 32**

Chembridge ID 5377378

MW 192.2
Formula C₉ H₁₂ N₄ O
Name 2-hydrazino-4-(methoxymethyl)-6-methylnicotinonitrile
LogSW -1.594
RB 2
tPSA 83.96
hDon 2
hAcc 3
cLogP .85
molLogP -.071091
SMILES N#CC(C(=CC(C)=N1)COC)=C1NN



MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

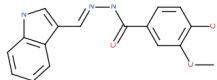
Compound # 33

Chembridge ID 5466567

MW 309.3
Formula C17 H15 N3 O3
Name 4-hydroxy-N'-(1H-indol-3-ylmethylene)-3-methoxybenzohydrazide

LogSW -3.215**RB** 3**tPSA** 86.71**hDon** 3**hAcc** 4**cLogP** 2.06**molLogP** 3.11008

SMILES N(C(C=CC=C1)=C1C1/C=N/NC(=O)C(C=CC(O)=C2OC)=C2)C=1

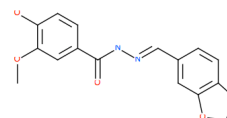
**Compound # 34**

Chembridge ID 5466778

MW 314.3
Formula C16 H14 N2 O5
Name N'-(1,3-benzodioxol-5-ylmethylene)-4-hydroxy-3-methoxybenzohydrazide

LogSW -2.884**RB** 3**tPSA** 89.38**hDon** 2**hAcc** 6**cLogP** 1.63**molLogP** 3.04285

SMILES C(C(=C(O)C=C1)OC)=C1C(=O)N/N=C/C(C=CC(OCOC1)=C12)=C2

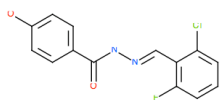
**Compound # 35**

Chembridge ID 5475747

MW 292.7
Formula C14 H10 Cl F N2 O2
Name N'-(2-chloro-6-fluorobenzylidene)-4-hydroxybenzohydrazide

LogSW -3.411**RB** 3**tPSA** 61.69**hDon** 2**hAcc** 3**cLogP** 3.11**molLogP** 3.66622

SMILES C(=N/NC(=O)C(C=CC(O)=C1)=C1)/C(C([Cl])=CC=C1)=C1F

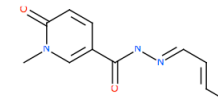
**Compound # 36**

Chembridge ID 5493440

MW 219.2
Formula C11 H13 N3 O2
Name N'-(2-buten-1-ylidene)-1-methyl-6-oxo-1,6-dihydro-3-pyridinecarbohydrazide

LogSW -2.081**RB** 3**tPSA** 63.46**hDon** 1**hAcc** 3**cLogP** 1.5**molLogP** .792339

SMILES C(N(C)C(=O)C=C1)=C1C(=O)N/N=C/C=C/C

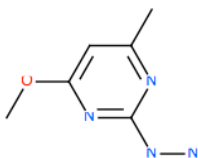


MW: molecular weight, g/mol	hDon: # of hydrogen-bond donors
LogSW: predicted aqueous solubility	hAcc: # of hydrogen-bond acceptors
RB: # of rotatable bonds	cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
tPSA: total polar surface area (Angstroms ²)	molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
	SMILES: Simplified Molecular Input Line Entry Specification

Compound # 37

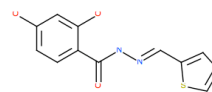
Chembridge ID 5511358

MW 154.2
Formula C6 H10 N4 O
Name 2-hydrazino-4-methoxy-6-methylpyrimidine
LogSW -1.266
RB 1
tPSA 73.06
hDon 2
hAcc 3
cLogP 1.1
molLogP .043357
SMILES C(C(C)=NC(NN)=N1)=C1OC

**Compound # 38**

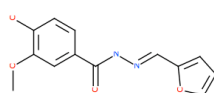
Chembridge ID 5521698

MW 262.3
Formula C12 H10 N2 O3 S
Name 2,4-dihydroxy-N'-(2-thienylmethylene)benzohydrazide
LogSW -2.489
RB 3
tPSA 81.92
hDon 3
hAcc 4
cLogP 2.29
molLogP 2.4167
SMILES C(C=C(C1O)=C(C=1O)C(=O)N/N=C/C(=CC=C1)S1)

**Compound # 39**

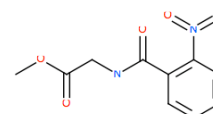
Chembridge ID 5532286

MW 260.2
Formula C13 H12 N2 O4
Name N'-(2-furylmethylene)-4-hydroxy-3-methoxybenzohydrazide
LogSW -2.158
RB 3
tPSA 84.06
hDon 2
hAcc 5
cLogP 1.24
molLogP 2.11852
SMILES C(C(=C(O)C=C1)OC)=C1C(=O)N/N=C/C(=CC=C1)O1

**Compound # 40**

Chembridge ID 5562286

MW 238.2
Formula C10 H10 N2 O5
Name methyl N-(2-nitrobenzoyl)glycinate
LogSW -2.749
RB 3
tPSA 98.54
hDon 1
hAcc 5
cLogP .13
molLogP .333642
SMILES O=N(=O)C(C=CC=C1)=C1C(=O)NCC(=O)OC



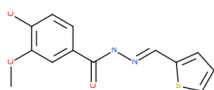
MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 41

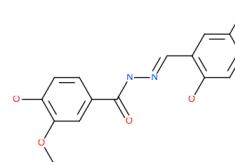
Chembridge ID 5567417

MW 276.3
Formula C₁₃ H₁₂ N₂ O₃ S
Name 4-hydroxy-3-methoxy-N'-(2-thienylmethylene)benzohydrazide
LogSW -2.676
RB 3
tPSA 70.92
hDon 2
hAcc 4
cLogP 1.71
molLogP 2.76616
SMILES C(C(=C(O)C=C1)OC)=C1C(=O)N/N=C/C(=CC=C1)S1

**Compound # 42**

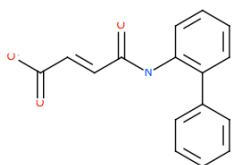
Chembridge ID 5630714

MW 320.7
Formula C₁₅ H₁₃ Cl N₂ O₄
Name N'-(5-chloro-2-hydroxybenzylidene)-4-hydroxy-3-methoxybenzohydrazide
LogSW -3.017
RB 3
tPSA 91.15
hDon 3
hAcc 5
cLogP 2.41
molLogP 3.2275
SMILES C(C(=C(O)C=C1)OC)=C1C(=O)N/N=C/C(C=C([Cl])C=C1)=C1O

**Compound # 43**

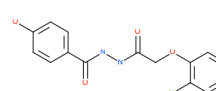
Chembridge ID 5774457

MW 267.3
Formula C₁₆ H₁₃ N O₃
Name 4-(2-biphenylamino)-4-oxo-2-butenoic acid
LogSW -2.73
RB 4
tPSA 66.4
hDon 2
hAcc 3
cLogP 1.85
molLogP 3.25109
SMILES C(=C/C(=O)[O-])/C(=O)NC(C=CC=C1)=C1C(C=CC=C1)=C1

**Compound # 44**

Chembridge ID 5798683

MW 320.7
Formula C₁₅ H₁₃ Cl N₂ O₄
Name N'-[(2-chlorophenoxy)acetyl]-4-hydroxybenzohydrazide
LogSW -3
RB 5
tPSA 87.66
hDon 3
hAcc 4
cLogP 2.39
molLogP 2.13078
SMILES C(C(=O)NNC(=O)C(C=CC(O)=C1)=C1)OC(C=CC=C1)=C1[Cl]



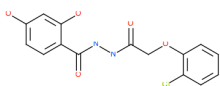
MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 45

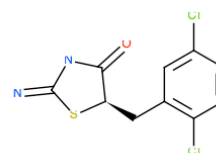
Chembridge ID 5799663

MW 336.7
Formula C₁₅ H₁₃ Cl N₂ O₅
Name N'-[(2-chlorophenoxy)acetyl]-2,4-dihydroxybenzohydrazide
LogSW -3.441
RB 5
tPSA 107.89
hDon 4
hAcc 5
cLogP 2.77
molLogP 1.75134
SMILES C(C=C(O)C1)=C(C(=O)C(=O)NNC(=O)COC(C=CC=C1)=C1[Cl])

**Compound # 46**

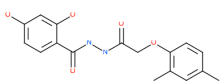
Chembridge ID 5851839

MW 275.2
Formula C₁₀ H₈ Cl₂ N₂ O S
Name 5-(2,5-dichlorobenzyl)-2-imino-1,3-thiazolidin-4-one
LogSW -4.478
RB 2
tPSA 52.95
hDon 2
hAcc 2
cLogP 3.83
molLogP 2.44747
SMILES C([C@@H](SC(=N)N1)C1=O)C(C=C(C=C1)[Cl])=C1[Cl]

**Compound # 47**

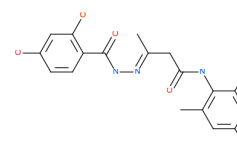
Chembridge ID 5853551

MW 330.3
Formula C₁₇ H₁₈ N₂ O₅
Name N'-[(2,4-dimethylphenoxy)acetyl]-2,4-dihydroxybenzohydrazide
LogSW -3.719
RB 5
tPSA 107.89
hDon 4
hAcc 5
cLogP 3.15
molLogP 1.83934
SMILES C(C=C(O)C1)=C(C(=O)C(=O)NNC(=O)COC(C=CC(=C1)C)=C1C)

**Compound # 48**

Chembridge ID 6213095

MW 369.4
Formula C₂₀ H₂₃ N₃ O₄
Name 3-[(2,4-dihydroxybenzoyl)hydrazono]-N-mesitylbutanamide
LogSW -2.526
RB 5
tPSA 111.02
hDon 4
hAcc 5
cLogP 1.42
molLogP 3.0898
SMILES C(C(=O)NC(C(C)=CC(C)=C1)=C1C)/C(=N/NC(=O)C(C=CC(O)=C1)=C1O)C)



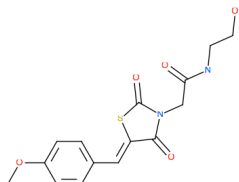
MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 49

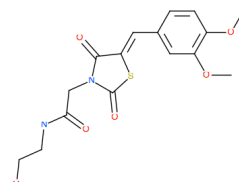
Chembridge ID 6326744

MW 336.4
Formula C₁₅ H₁₆ N₂ O₅ S
Name N-(2-hydroxyethyl)-2-[5-(4-methoxybenzylidene)-2,4-dioxo-1,3-thiazolidin-3-yl]acetamide
LogSW -2.549
RB 5
tPSA 95.94
hDon 2
hAcc 5
cLogP 1.05
molLogP .945202
SMILES C(=C(S1)/C(N(C1=O)CC(=O)NCCO)=O)/C(C=CC(=C1)OC)=C1

**Compound # 50**

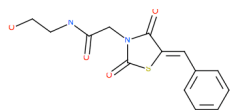
Chembridge ID 6348549

MW 366.4
Formula C₁₆ H₁₈ N₂ O₆ S
Name 2-[5-(3,4-dimethoxybenzylidene)-2,4-dioxo-1,3-thiazolidin-3-yl]-N-(2-hydroxyethyl)acetamide
LogSW -2.546
RB 5
tPSA 105.17
hDon 2
hAcc 6
cLogP .79
molLogP .915229
SMILES C(=C(S1)/C(N(C1=O)CC(=O)NCCO)=O)/C(C=CC(=C1)OC)OC=C1

**Compound # 51**

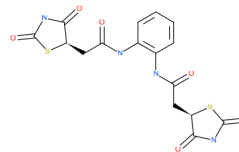
Chembridge ID 6356536

MW 306.3
Formula C₁₄ H₁₄ N₂ O₄ S
Name 2-(5-benzylidene-2,4-dioxo-1,3-thiazolidin-3-yl)-N-(2-hydroxyethyl)acetamide
LogSW -2.399
RB 5
tPSA 86.71
hDon 2
hAcc 4
cLogP 1.13
molLogP .855157
SMILES C(=C(S1)/C(N(C1=O)CC(=O)NCCO)=O)/C(C=CC=C1)=C1

**Compound # 52**

Chembridge ID 6631742

MW 422.4
Formula C₁₆ H₁₄ N₄ O₆ S₂
Name N,N'-1,2-phenylenebis[2-(2,4-dioxo-1,3-thiazolidin-5-yl)acetamide]
LogSW -3.205
RB 6
tPSA 150.54
hDon 4
hAcc 6
cLogP -.45
molLogP -.696903
SMILES C([C@@H](SC(=O)N1)C1=O)C(=O)NC(C=CC=C1)=C1NC(=O)C[C@@H](SC(=O)N1)C1=O



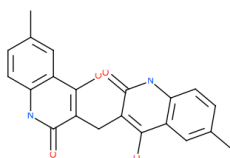
MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 53

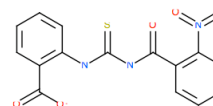
Chembridge ID 6946462

MW 362.4
Formula C₂₁ H₁₈ N₂ O₄
Name 3,3'-methylenebis(4-hydroxy-6-methyl-2(1H)-quinolinone)
LogSW -3.695
RB 2
tPSA 106.18
hDon 4
hAcc 4
cLogP 2.17
molLogP 3.08223
SMILES C(C(C(=O)N1)=C(C2=C1C=CC(C)=C2)O)C(C(=O)N1)=C(C2=C1C=CC(=C2)C)O

**Compound # 54**

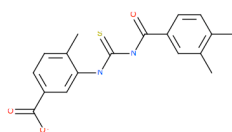
Chembridge ID 6949907

MW 345.3
Formula C₁₅ H₁₁ N₃ O₅ S
Name 2-(((2-nitrobenzoyl)amino)carbonothioyl)amino)benzoic acid
LogSW -4.089
RB 3
tPSA 121.57
hDon 3
hAcc 5
cLogP 2.32
molLogP 1.98676
SMILES O=N(=O)C(C=CC=C1)=C1C(=O)NC(=S)NC(C=CC=C1)=C1C(=O)[O-]

**Compound # 55**

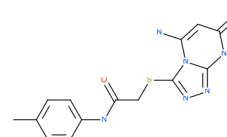
Chembridge ID 6988892

MW 342.4
Formula C₁₈ H₁₈ N₂ O₃ S
Name 3-(((3,4-dimethylbenzoyl)amino)carbonothioyl)amino)-4-methylbenzoic acid
LogSW -4.711
RB 3
tPSA 78.43
hDon 3
hAcc 3
cLogP 3.53
molLogP 3.52074
SMILES C(C(C(=O)[O-])=CC1)=C(C=1C)NC(=S)NC(=O)C(C=CC(=C1C)C)=C1

**Compound # 56**

Chembridge ID 7446357

MW 330.4
Formula C₁₄ H₁₄ N₆ O₂ S
Name 2-[(5-amino-7-oxo-7,8-dihydro[1,2,4]triazolo[4,3-a]pyrimidin-3-yl)thio]-N-(4-methylphenyl)acetamide
LogSW -3.189
RB 4
tPSA 118.17
hDon 3
hAcc 4
cLogP -.222
molLogP 1.3939
SMILES C(C(=O)N1)=C(N(C1=NN1)C=1SCC(=O)NC(C=CC(=C1)C)=C1)N



MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

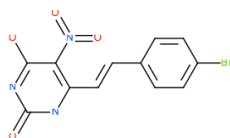
hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification

Compound # 57

Chembridge ID 7507803

MW 338.1
Formula C₁₂H₈BrN₃O₄
Name 6-[2-(4-bromophenyl)vinyl]-4-hydroxy-5-nitro-2(1H)-pyrimidinone

LogSW -3.035
RB 2
tPSA 109.12
hDon 2
hAcc 5
cLogP 2.003



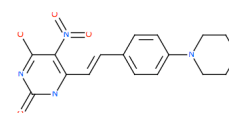
molLogP 1.969
SMILES C(/C(NC(=O)N1)=C(C=1O)N(=O)=O)=C/C(C=CC([Br])=C1)=C1

Compound # 58

Chembridge ID 7530375

MW 344.3
Formula C₁₆H₁₆N₄O₅
Name 4-hydroxy-6-[2-[4-(4-morpholinyl)phenyl]vinyl]-5-nitro-2(1H)-pyrimidinone

LogSW -3.452
RB 3
tPSA 121.59
hDon 2
hAcc 6
cLogP .96



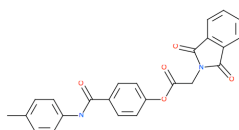
molLogP .975792
SMILES C(/C(NC(=O)N1)=C(C=1O)N(=O)=O)=C/C(C=CC(=C1)N(CCOC2)C2)=C1

Compound # 59

Chembridge ID 7608933

MW 414.4
Formula C₂₄H₁₈N₂O₅
Name 4-[[[(4-methylphenyl)amino]carbonyl]phenyl (1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)]acetate

LogSW -5.227
RB 6
tPSA 92.78
hDon 1
hAcc 5
cLogP 3.785



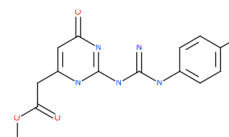
molLogP 3.94171
SMILES C(C(=O)OC(C=CC(=C1)C(=O)NC(C=CC(C)=C2)=C2)=C1)N(C(=O)C(C=CC=C1)=C12)C2=O

Compound # 60

Chembridge ID 7666888

MW 315.3
Formula C₁₅H₁₇N₅O₃
Name methyl [2-((imino[(4-methylphenyl)amino]methyl)amino)-6-oxo-3,6-dihydro-4-pyrimidinyl]acetate

LogSW -2.315
RB 6
tPSA 119.96
hDon 4
hAcc 5
cLogP -.724



molLogP .491161
SMILES C(C(=O)N=C(NC(=N)NC(C=CC(C)=C1)=C1)N1)=C1CC(=O)OC

MW: molecular weight, g/mol
 LogSW: predicted aqueous solubility
 RB: # of rotatable bonds
 tPSA: total polar surface area (Angstroms²)

hDon: # of hydrogen-bond donors
 hAcc: # of hydrogen-bond acceptors
 cLogP: predicted octanol-water partition coefficient (Chembridge algorithm)
 molLogP: predicted octanol-water partition coefficient (Molsoft algorithm)
 SMILES: Simplified Molecular Input Line Entry Specification