

Activator Inhibitor No effect	Compounds*EC	Verified with pure compounds	EC50	Class/Function of compounds
INSULIN SENSITIZERS				
A	Pioglitazone Hydrochloride	Y	0.6 µM	thiazolidinedione
A	Ciglitazone	Y	4.9 µM	thiazolidinedione
A	Rosiglitazone	Y	-	thiazolidinedione
A	Rosiglitazone Maleate	-	-	thiazolidinedione
A	Osufiram (Thiazum)	Y	10 µM	acetylaldehyde dehydrogenase inhibitor
DIS-INHIBITORS				
A	Everolimus (Rapamycin)	Y	0.16 nM	immunosuppressant; mTORC1 inhibitor
No	Cyclosporin A, FK506	Y	-	immunosuppressants; not active against mTORC1
BETA-ADRENERGIC agonists and inverse agonists/antagonists				
A	Isoproterenol Hydrochloride	Y	14 nM	beta adrenergic receptor agonist
A	Mesoprololol	Y	4.9 µM	beta adrenergic receptor agonist
A	Clenbuterol Hydrochloride	-	-	beta adrenergic receptor agonist
A	Dobutamine Hydrochloride	-	-	beta adrenergic receptor agonist
A	Isoetharine Mesylate Salt	-	-	beta adrenergic receptor agonist
A	Isoxsuprine Hydrochloride	-	-	beta adrenergic receptor agonist
A	Levalbuterol Hydrochloride	-	-	beta adrenergic receptor agonist
A	Levonastelinolol	-	-	beta adrenergic receptor agonist
A	Terbutaline Hemisulfate	Y	-	beta adrenergic receptor agonist
A	Tulobuterol	-	-	beta adrenergic receptor agonist
I	Propranolol hydrochloride	-	8 µM	beta adrenergic antagonist/inverse agonist
I	(S)-propranolol hydrochloride	-	-	beta adrenergic antagonist/inverse agonist
I	(R)-Propranolol hydrochloride	-	-	beta adrenergic antagonist/inverse agonist
A	Epinastine	Y	6.5 µM	beta adrenergic receptor agonist
A	Foraskolin	Y	1.5 µM	activates adenylate cyclase, increases cAMP and cGMP
ADENOSINE RECEPTORS: agonists and inverse agonists/antagonists				
A	2-Chloroadenosine	Y	0.2 µM	purine analog, adenosine receptor agonist
I	CGS 15943	-	-	adenosine receptor antagonist/inverse agonist
I	NE-methyladenosine	-	-	naturally occurring adenosine analog
I	Isomethylxanthine (IBMX)	Y	0.5 mM	adenosine receptor antagonist/inverse agonist; PDE inhibitor (IC50 2-50 µM)
CORTICOSTEROIDS				
A	Flumethasone Phosphate	Y	2.5 nM	Steroid
A	Fluorometholone	Y	-	Steroid
A	Flurandrenolide	Y	-	Steroid
A	Flu-Acetoxy Progesterone	-	-	Steroid
A	18-Morketosterone	-	-	Steroid
A	Betamethasone	-	-	Steroid
A	Halobutolone	-	-	Steroid
A	Methylprednisolone	-	-	Steroid
A	Methylprednisolone Acetate	-	-	Steroid
A	Prednicarbate	-	-	Steroid
A	Prednisolone Acetate	-	-	Steroid
A	Prednisone	-	-	Steroid
A	Triamcinolone Acetonide	-	-	Steroid
A	Dexamethasone	Y	9 nM	Steroid
ANDROGENIC STEROIDS				
I	Testosterone Propionate	-	-	androgen receptor agonist; steroid
A	Flutamide	-	-	androgen receptor antagonist; non-steroidal
CARDIOTONIC STEROIDS				
A	Proxalindin A	Y	-	Na ⁺ /K ⁺ ATPase inhibitor
A	Medrysone	Y	-	Na ⁺ /K ⁺ ATPase inhibitor
A	Strophantidin	Y	-	Na ⁺ /K ⁺ ATPase inhibitor
A	Quaban	Y	13 µM	Na ⁺ /K ⁺ ATPase inhibitor
ANTI-BIOTICS				
I	Proguanil hydrochloride	-	-	anti-biotic (anti-malaria)
I	Niclosamide	-	-	anti-biotic (anti-nematode)
I	Amaziracine	-	-	anti-biotic (anti-neoplasic)
I	Homoharringtonine	-	-	anti-biotic (anti-neoplasic); phytochemical; medicinal herb, active compound
I	Cetylpyridinium chloride	-	-	antiseptic/antimicrobial
PROTEIN SYNTHESIS INHIBITORS				
I	Fluoremycin dihydrochloride	Y	13 µM	protein synthesis inhibitor
I	Lycorine hydrochloride	Y	6.3 µM	protein synthesis inhibitor (putative inhibitor of Akt phosphorylation)
I	Cycloheximide	-	-	protein synthesis inhibitor
I	Anisomycin	-	-	protein synthesis inhibitor
I	Cephaline	-	-	protein synthesis inhibitor
I	Emetine	-	-	protein synthesis inhibitor
HETEROCYCLIC AMINES				
I	Paroxetine hydrochloride (Paxil)	Y	-	antidepressant; 5HT ₂ antagonist; serotonin reuptake inhibitor
I	Maprotiline hydrochloride	Y	32 µM	tetracyclic antidepressant; NE reuptake inh. antagonist; H1, α1, 5HT ₂
I	Desipramine hydrochloride	-	-	TCA, dibenzazepine; NE reuptake inhibitor; antagonist; H1, α1, 5HT ₂
I	Imipramine hydrochloride	-	-	TCA, dibenzazepine; NE reuptake inhibitor; antagonist; H1, α1, 5HT ₂
I	Norcytobenzaprine	-	-	TCA, dibenzazepine; NE reuptake inhibitor; antagonist; H1, α1, 5HT ₂
I	Protriptyline hydrochloride	-	-	TCA, dibenzazepine; NE reuptake inhibitor; antagonist; H1, α1, 5HT ₂
I	Nortriptyline hydrochloride	-	-	TCA, dibenzazepine; NE reuptake inhibitor; antagonist; H1, α1, 5HT ₂
I	Homochlorcyclizine	-	-	antihistamine, diazepine, antagonist; H1
I	Azelastine hydrochloride	-	-	antihistamine, pthalazine; antagonist; H1
I	Promethazine hydrochloride	-	-	antihistamine, phenothiazine, antagonist; H1
I	Promazine hydrochloride	-	-	antipsychotic, phenothiazine, antagonist; D2
I	Thioridazine hydrochloride	-	-	antipsychotic, phenothiazine, antagonist; D2, α1, 5HT ₂
I	Bromperidol	-	-	antipsychotic, butyrophenone, antagonist; D2, α1, 5HT ₂
I	Haloperidol	-	-	antipsychotic, butyrophenone, antagonist; D2, α1, 5HT ₂
A	Methylperone Hydrochloride	-	-	antipsychotic, butyrophenone, antagonist; D2, α1, 5HT ₂
R(+)-SCH 23390 Hydrochloride	-	-	-	habenzazepine; antagonist; D1
I	Quinidine hydrochloride	-	-	agonist; D2, D3
I	Naphazoline hydrochloride	-	-	indazole; agonist; α1
I	Rimcazone dihydrochloride	-	-	dopamine reuptake inhibitor; antagonist; α1
I	Isosergine	-	-	vesicular monoamine transporter inhibitor
I	Dibucaine hydrochloride	-	-	local anesthetic, quinoline, sodium channel inhibitor
I	Loperamide hydrochloride	-	-	anti-diarrheal; agonist; µ opioid receptor
I	Chiroquine	Y	50 µM	lysosomotropic amine
I	Ammonium Chloride	Y	5 mM	lysosomotropic amine
PHYTOCHEMICALS: supplements and active compounds from medicinal herbs				
I	Parthenocides	Y	40 µM	phytochemical; HDAC1 inhibitor; anti-inflammatory (NF-κB); supplement
I	Piperlongumine	Y	3.3 µM	phytochemical; P13 Kinase/Akt/mTOR inhibitor; supplement
I	Resveratrol	Y	5 µM	phytochemical; P13 Kinase/Akt/mTOR inhibitor; anti-oxidant; supplement
I	Tocopherol (R,S)	-	-	phytochemical; anti-oxidant; supplement
I	Catestatin	-	-	phytochemical; anti-oxidant; supplement
I	Dihydrocucurbitacin	-	-	phytochemical; anti-oxidant; supplement
I	Catechin pentaacetate	-	-	phytochemical; polyphenol; supplement
I	Rubescensin A	-	-	phytochemical; diene; supplement
I	Tetrandrine	-	-	phytochemical; quinoline alkaloid; medicinal herb, active compound
I	Oridonin (isodordon)	-	-	phytochemical; diene; medicinal herb, active compound
I	Triptolide	-	-	phytochemical; diene; medicinal herb, active compound
I	Erycin	-	-	phytochemical; iridoid; medicinal herb, active compound
A	Tanshinone I	Y	-	phytochemical; tanshinone; medicinal herb, active compound
A	Dihydrotanshinone I	Y	-	phytochemical; tanshinone; medicinal herb, active compound
A	Cryptotanshinone	Y	-	phytochemical; tanshinone; medicinal herb, active compound
No	Tanshinone IIa (Tanshinone B)	-	-	phytochemical; tanshinone; medicinal herb, active compound
A	4-Methoxy Dalbergione	Y	-	phytochemical; 1,4-benzoquinone; medicinal herb, active compound
A	4,4'-Dimethoxy Dalbergione	Y	-	phytochemical; 1,4-benzoquinone; medicinal herb, active compound
A	1,4,8,8-Tetrahydroxy-2,6-dimethyl-anthraquinone	Y	-	phytochemical; 9,10-anthraquinone; medicinal herb, active compound
A	Pachyrhizin	Y	-	phytochemical; coumarin derivative; supplement
A	Pterysin	Y	-	phytochemical; coumarin derivative; supplement
A	Urosolic Acid	-	-	phytochemical; iriterpenoid; supplement
A	Astragaloside A	-	-	phytochemical; saponin; supplement
A	Gastrodin	-	-	phytochemical; glucoside; supplement
A	Ruscogenin	-	-	phytochemical; pyridopyrimidine; medicinal herb, active compound
A	Rotundone	-	-	phytochemical; isoguaianolide; medicinal herb, active compound
A	Grape Seed Proanthocyanidin Extract	Y	100 µg/ml	phytochemical; polyphenols; supplement
No	Catechin and epicatechin	Y	-	phytochemicals; polyphenols; supplements
I	L'294002 (LY2)	Y	15 µM	P13kinase inhibitor; exocytosis inhibitor
I	Akt	Y	-	AKT inhibitor
FLAVONOIDS				
A	Icaritin; 8-Prenylkaempferol-3,7-O-methylacetate; 3,7,4',6,8,7-Hexa-hydroxyflavone	Y	-	phytochemical; supplement
A	Mylricetin; 3,7,4',6,8,7-Hexa-hydroxyflavone	Y	-	phytochemical; supplement
A	Dihydroquercetin	-	-	phytochemical; supplement
I	Keempferol; 3,4',5,7-Tetra-hydroxyflavone	Y	-	phytochemical; supplement
I	Quercetin; 3,7,4',6,8,7-Penta-hydroxyflavone	-	-	phytochemical; supplement
I	Genistein; 3,4',7-Trihydroxy-3'-methoxyflavone	-	-	phytochemical; supplement
I	Apigenin; 4',5,7-Trihydroxyflavone	-	-	phytochemical; supplement
I	Genistein; 4',6,8,7-Trihydroxyflavone	-	-	phytochemical; supplement
I	Chrysin; 5,7-Dihydroxyflavone	-	-	phytochemical; supplement
I	Luteolin; 5,7-Dihydroxyflavone	-	-	phytochemical; supplement
I	Luteolin 4-methyl ether; 3',5,7-Trihydroxy-4-methoxyflavone	-	-	phytochemical; supplement
I	Baicalin; 5,6,7-Trihydroxyflavone	-	-	phytochemical; supplement
I	Morin; 2',3,4',6,7-Penta-hydroxyflavone	-	-	phytochemical; supplement
I	3,4'-Dihydroxyflavone	-	-	phytochemical
I	6,4'-Dihydroxyflavone	-	-	phytochemical
I	7,4'-Dihydroxyflavone	-	-	phytochemical
OTHER				
A	8-Asagunin	Y	12.5 µM	purine analog
A	Ebselen	Y	7.5 µM	organoselenium
A	Ibuprofen	Y	15 µM	1,4-benzoquinone; synthetic derivative of CoQ10
A	Lawsone (Nannonatic acid)	-	-	phytochemical; naphthoquinone
A	Creatinine	Y	-	breakdown product of creatine phosphate
A	Ruscogenin	Y	-	entrapalase inhibitor (anti-diarrheal)
A	Piroxicam	-	-	NSAID (prevents synthesis of prostaglandin)
A	Latanoprost	-	-	NSAID (prostaglandin analog)
A	Moxifloxacin Hydrochloride	-	-	fluoroquinolone
A	Picramidic Acid	-	-	purinone
A	Anastrozole	-	-	aromatase inhibitor
A	Cysteamine Hydrochloride	-	-	cysteine and amine
A	Distyrenylcyclopropane	-	-	irritant
I	Obussquinone	-	-	phytochemicals; quinone, irritant
I	Crimamine	-	-	phytochemicals; poison
I	Benzalkonium chloride	-	-	cationic surfactant

* compounds in bold screened positive and were verified by triplicate retesting using compounds from the libraries.