**Supporting information**

**Supporting table**

**S1 Table. Model organism used in each reference.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factor** | **Abbreviation** | **Effect** |  | **Model organism** |
| Activin A | ata | btc1 |  | Sprague-Dawley rat (1) |
| Activin A | ata | ctk0 |  | HUVECs (2) |
| Activin A | ata | ins1 |  | Cultured human pancreatic islets (3) |
| Activin A | ata | adp0 |  | Human adipose progenitors (4) |
| adipose tissue | adp | ata1 |  | Human adipose progenitors (4) |
| adipose tissue | adp | tnf1 |  | Human adipose tissue (5) |
| adipose tissue | adp | ctk1 |  | Human adipose tissue (6) |
| adipose tissue | adp | and1 |  | Human adipose tissue (7) |
| adipose tissue | adp | lep1 |  | Human adipose tissue (8); Rat epididymal fat pad (9); Human adipose tissue (10); C57BL/6J mice (11) |
| adipose tissue | adp | sfr1 |  | C57BL/6 mice (12); Mice (13) |
| adiponectin | and | ina1 |  | Mice (14); Mice (15) |
| adiponectin | and | ata1 |  | Primary human monocytes (16) |
| adiponectin | and | ffa0 |  | C57BL/6J mice (17) |
| adiponectin | and | fdi0 |  | Wistar rats (18) |
| adiponectin | and | inr0 |  | Human aortic endothelial cells (19) |
| adiponectin | and | fty1 |  | Bovine ovarian cells and embryo (20); Mice embryos (21); Human and C57BL/6J mice granulosa and cumulus cells (22) |
| adiponectin | and | tri0 |  | C57BL/6J mice (17) |
| aggression | agr | chl0 |  | Human subjects (23) |
| aggression | agr | egf1 |  | Mice (24); Osteoblast-like cell line (25); Mice (26) |
| aggression | agr | ngf1 |  | Mice (27); Mice (28); Mice (29); Mice (30); Mice (31) |
| aggression | agr | bdn1 |  | Hamsters (32) |
| aggression | agr | dop1 |  | Long-Evans rats (33); Long-Evans rats (34) |
| aggression | agr | ser0 |  | Long-Evans rats (33); Long-Evans rats (34) |
| aggression | agr | edp1 |  | Human subjects (35); Human subjects (36) |
| aggression | agr | tet1 |  | Human subjects (37) |
| aggression | agr | cts1 |  | Osteoblast-like cell line (25); Human subjects (37) |
| aggression | agr | cck1 |  | Long-Evans rats (38) |
| aggression | agr | et11 |  | Mice (39) |
| aggression | agr | igf1 |  | Pudu deer (40); Baboons (41) |
| alpha MSH | msh | tri0 |  | OLETF rats (42) |
| alpha MSH | msh | ina1 |  | OLETF rats (42); Sprague-Dawley rats (43) |
| alpha MSH | msh | agr1 |  | Mice (44); Wistar rats (45); Mice (46) |
| alpha MSH | msh | adp0 |  | Sprague-Dawley rats (43) |
| alpha MSH | msh | msl1 |  | Wistar rats (47) |
| alpha MSH | msh | ctk0 |  | Blood samples (48) |
| alpha MSH | msh | fdi0 |  | Long-Evans rats (49); OLETF rats (42); Sprague-Dawley rats (50) |
| angiogenesis | ang | bgl1 |  | Logic |
| anti-oxidant  | aox | inr0 |  | Mice (51) |
| arginine vassopressin | avp | agr1 |  | Hamsters (52) |
| arginine vassopressin | avp | cfn1 |  | Human subject (53); Human subjects (54); Human subjects (55) |
| arginine vasopressin | avp | ins1 |  | Human subjects (56) |
| arginine vassopressin | avp | gng1 |  | Porton-Wistar rats (57) |
| BDNF | bdn | btc1 |  | C57BL/KsJ-db/db mice (58) |
| BDNF | bdn | ina1 |  | Mice (59); Zucker fatty rats (60); C57BL/KsJ-db/db mice (61) |
| BDNF | bdn | cfn1 |  | Human subject (62) |
| BDNF | bdn | ser1 |  | C57BL/6 mice (63) |
| BDNF | bdn | fdi0 |  | Human subject (62); C57BL/6 mice (64); Mice (59) |
| beta adrenergic receptors | bar | adp0 |  | Human adipocytes (65); Beagle dogs (66) |
| beta cells | btc | ins1 |  | Human and rat pancreatic islets (67) |
| beta cells | btc | gap1 |  | Rats and Human insulinoma(68) |
| CART | car | fdi0 |  | Mice (69); Wistar rats (70) |
| cholecystokinin | cck | fdi0 |  | 129/SvEv mice (71); Human subjects (72); OLETF rats (73); Sprague-Dawley rats (74); Rhesus monkey (75); Rats (76); Mice (77) |
| cholecystokinin | cck | ina1 |  | Mice (78) |
| cholecystokinin | cck | gst0 |  | Pigs (79) |
| cholecystokinin | cck | ins1 |  | Human subjects (80) |
| cholesterol | chl | ser1 |  | Macaques (81) |
| cholesterol | chl | inr1 |  | Mice (82) |
| cholesterol | chl | agr0 |  | Monkeys (83); Macaques (81) |
| cholesterol | chl | cfn1 |  | Human subjects (84) |
| cognitive function | cfn | bgl0 |  | Logic |
| cognitive function | cfn | dip1 |  | Logic |
| corticosteroids | cts | tri0 |  | Sprague-Dawleys rats (85); Human subjects (86) |
| corticosteroids | cts | ffa1 |  | Sprague-Dawleys rats (85); Human subjects (86) |
| corticosteroids | cts | gng1 |  | Hepatoma cells (87); H4IIE rat hepatoma cells (88); H4IIE rat hepatoma cells (89) |
| corticosteroids | cts | ina0 |  | Rats (90); Zucker rat (91); Rat muscle tissue (92); Mice (93); Human subjects (94); Human subject (95); Human subjects (96); Human subjects (97) |
| corticosteroids | cts | agr0 |  | Mice (98) |
| corticosteroids | cts | inr0 |  | Human subjects (99); Normal human epithelial cells (100); Human subjects (101); Human subjects (102) |
| corticosteroids | cts | ins0 |  | Hamster HIT-15 Beta cells (103); Mice pancreas (104) |
| cortico releasing hormone | crh | fdi0 |  | Mice (105) |
| cortico releasing hormone | crh | cts1 |  | C57BL/6J mice (106); Rats (107); Human subjects (108); normal human epidermal melanocytes (109); Human fetal adrenal cells (110); Mice (111) |
| cortico releasing hormone | crh | agr0 |  | Harlan-Sprague-Dawley mice (112); Rats (113) |
| cortico releasing hormone | crh | ins1 |  | Mice pancreatic islets (56) |
| cortico releasing hormone | crh | edp1 |  | Pituitary (114); Mouse pituitary cell line (ATt-20) (115) |
| cytokines | ctk | edp1 |  | Mouse pituitary cell line (ATt-20) (115); Mouse pituitary cell line (116) |
| cytokines | ctk | crh1 |  | Baboons (117); Rats (118); Rats (119) |
| cytokines | ctk | lep1 |  | Hamsters (120); C57BL/6 mice (121) |
| cytokines | ctk | inr1 |  | Logic |
| cytokines | ctk | oxy1 |  | Rats (122) |
| cytokines | ctk | avp1 |  | Rats (122) |
| cytokines | ctk | ina0 |  | Human subject (123); Human megakaryotic cell line CHRF-288-11 (124) |
| cytokines | ctk | klt0 |  | C57/BL6 rats (125) |
| cytokines | ctk | et11 |  | Porcine endothelial cells (126) |
| diplomat | dip | ins1 |  | Chimpanzees (127) |
| dopamine | dop | nep0 |  | Sprague-Dawley rats (128) |
| dopamine | dop | agr1 |  | Rats (129); Sprague-Dawley rats (128) |
| dopamine | dop | ost1 |  | Mice (130) |
| dopamine | dop | ocl1 |  | Human subjects (131) |
| dopamine | dop | ina1 |  | C57BL6 mice (132) |
| dopamine | dop | msl1 |  | Sprague-Dawley rats (133) |
| dopamine | dop | ins0 |  | INS-1E cells and pancreatic islets (134); C57BL/5J mice (135) |
| dopamine | dop | lep0 |  | Human adipocytes (136) |
| dopamine | dop | il61 |  | Human adipocytes (136) |
| dopamine | dop | and1 |  | Human adipocytes (136) |
| dopamine | dop | ffa0 |  | C57BL/5J mice (135) |
| dopamine | dop | tri0 |  | C57BL/5J mice (135) |
| dopamine | dop | pgl0 |  | C57BL/5J mice (135) |
| dopamine | dop | fdi0 |  | Zucker rats (137); C57BL/5J mice (135) |
| egf | egf | noc0 |  | Dorsal root ganglia neurons (138) |
| egf | egf | btc1 |  | Canine islets and murine bet cells (139); FVB E1-DN mice (140) |
| egf | egf | bdn1 |  | CD-1 mice (141) |
| egf | egf | ina1 |  | Human adipose tissue (142) |
| egf | egf | fty1 |  | Mice (143); Mice (144); Mice (145); C3H/HeN mice (146) |
| endorphin | edp | bdn1 |  | Sprague-Dawley rats (147) |
| endorphin | edp | ina1 |  | Rats (148) |
| endorphin | edp | agr0 |  | Mice (149) |
| endorphin | edp | fdi1 | ? | Rats (50); Rats (150) |
| endorphin | edp | fdi0 | ? | Zucker rats (151) |
| endothelin | et1 | ghr1 |  | Holstein Steers (152); Holstein Steers (153) |
| endothelin | et1 | ina0 |  | Rat muscles (154); Sprague-Dawley rats (155); Human subjects (156) |
| endothelin | et1 | agr1 |  | Mice (39) |
| endothelin | et1 | ins1 |  | Mice islets of Langerhans (157) |
| endothelin | et1 | lep1 |  | Adipocyte cell lines (158) |
| endothelin | et1 | vdl0 |  | Pigs, Humans and Rats (159); Human epicardial coronary arteries (160); Porcine endothelial cells (161) |
| EPO | epo | ang1 |  | Human glioma (162);Human mesenchymal stem cells (163) |
| fertility | fty | egf1 |  | Mice (164) |
| fertility | fty | oxy1 |  | Rats (165) |
| fertility | fty | otg1 |  | Mice (166) |
| FFA | ffa | bdn0 |  | Human subjects (167) |
| FFA | ffa | gng1 |  | Human subjects (168) |
| FFA | ffa | inj0 |  | Human subjects (169) |
| FFA | ffa | ina0 |  | Human subjects (167); Human subjects (170); Human subjects (171); Human subjects (169) |
| food intake | fdi | adp1 |  | Sprague-Dawley rats (172) |
| food intake | fdi | agr0 |  | Meerkats (173) |
| food intake | fdi | msl1 |  | Logic |
| food intake | fdi | ffa1 |  | Logic |
| food intake | fdi | ins1 |  | Rats (174) |
| food intake | fdi | pgl1 |  | Logic |
| GABA Brain | gab | agr1 | ? | Mice (175) |
| GABA Brain | gab | agr0 | ? | Human subjects (176); Mice (177) |
| GABA Brain | gab | grh1 |  | Mice (178) |
| GABA Brain | gab | fdi0 | ? | Rats (179); Rats (180) |
| GABA Brain | gab | fdi1 | ? | Sprague-Dawley rats (181); Rats (182) |
| GABA pancreas | gap | inr0 |  | Mice(183) |
| GABA pancreas | gap | btc1 |  | Human islets and Rats(184) |
| gastrin | gst | btc1 |  | Rat pancreas (185) |
| gastrin | gst | agr1 |  | Mice (186) |
| gastrin | gst | ina1 |  | Mice (187) |
| gastrin | gst | adp0 |  | Mice (187) |
| ghrelin | ghr | agr1 |  | BALB/c mice (188) |
| ghrelin | ghr | fdi1 |  | Mice (189); Rats (190); Human subjects (191); Wistar rats (192); Mice and Rats (193); Sprague-Dawley rats (194); Sprague-Dawly rats (195) |
| ghrelin | ghr | hgh1 |  | Holstein Steers (153); Rats (196); Rats (197); Wistar rats (192); Human subjects (198); Mouse hypothalamus (199); Human subjects (200); Human subjects (191) |
| ghrelin | ghr | ins1 |  | Sprague-Dawley rats (201) |
| ghrelin | ghr | gab1 |  | Sprague-Dawley rats (202); Rats and mice (203) |
| ghrelin | ghr | et10 |  | Sprague-Dawley rats (204) |
| glucagon | glg | gng1 |  | Rats (205); Rats (206); Bovine (207) |
| gluconeogenesis | gng | pgl1 |  | Rats (205); Rats (206) |
| glut1 | gt1 | bgl1 |  | Rats (208) |
| GnRH | grh | tet1 |  | European ground squirrels (209); Sprague-Dawley rats (210) |
| growth hormone | hgh | msl1 |  | Human subjects (211); Human subjects (212); Human subjects (213) |
| growth hormone | hgh | agr1 |  | Mice (214) |
| growth hormone | hgh | ins1 |  | Human subjects (215); Human subjects (216) |
| growth hormone | hgh | ina0 |  | Human subjects (215); Human subjects (216); 3T3-L1 adipocytes (217); Human subjects (218); Human subjects (219); balb/c mice (220) |
| growth hormone | hgh | igf1 |  | Rats (221); Human subjects (219); Human subjects (215); Human subjects (222); Mice (223) |
| growth hormone | hgh | fty1 |  | Rats (221) |
| histamine | hst | fdi0 |  | H1KO mice (224); Sprague-Dawley rats (225); Wistar King A rats (226); Mice (227) |
| histamine | hst | agr1 |  | Mice (228) |
| IGF 1 | igf | ina1 |  | Human subjects (229); Human subjects (230); Human subjects (231); Sprague-Dawley rats (232); Human subjects (222); Human subjects (233); Mice (234); Mice (235); Wistar rats (236) |
| IGF 1 | igf | btc1 |  | Mice (237) |
| IGF 1 | igf | fdi0 |  | Wistar rats (238); Wistar rats (236) |
| IGF 1 | igf | adp0 |  | Sprague-Dawley rats (232); Wistar rats (236) |
| IGF1 | igf | msl1 |  | C57BL/6 mice (239); Mice (240); Mice (241); Rabbits (242) |
| IGF1 | igf | ins0 |  | Rat pancreatic beta cells (243); Mice (235) |
| IGF1 | igf | hgh0 |  | Primary rat pituitary cells (244); Sheep (245); Mice (234) |
| IGF1 | igf | ost1 |  | Mice (246) |
| IGF1 | igf | ctk0 |  | Sprague-Dawley rats (247) |
| IGF1 | igf | tnf0 |  | Sprague-Dawley rats (247) |
| Il-6 | il6 | agr0 |  | Mice (248) |
| Il-6 | il6 | ina0 |  | Human adipose tissue (249); Mouse hepatocytes (250) |
| Il-6 | il6 | adp0 |  | Mice (251) |
| Il-6 | il6 | inr0 |  | Human subjects(252) |
| Il-6 | il6 | glp1 |  | Mice(253) |
| Il-6 | il6 | fdi0 |  | Mice(254) |
| inflammatory response | inr | ina0 |  | Mice (255) |
| injury (growth factors) | inj | btc1 |  | Human pancreatic islets (256); Mice (257) |
| injury (growth factors) | inj | hst1 |  | Dogs (258) |
| injury (growth factors) | inj | adp0 |  | Mice (259) |
| injury (growth factors) | inj | ins0 |  | Mice (259) |
| injury (growth factors) | inj | ina1 |  | Mice (259) |
| injury (growth factors) | inj | agr0 |  | Mice (260) |
| injury (growth factors) | inj | inr0 |  | Human fibroblast cells (261) |
| injury (growth factors) | inj | ang1 |  | Mice (262) |
| insulin | ins | cfn1 |  | Human subjects (263); Human subjects (264); Human subjects (265); Human subjects (266); Mice (267) |
| insulin | ins | ktg0 |  | Rat adipose tissue (268) |
| insulin | ins | btc1 |  | Canine islets and murine beta cells (139) |
| insulin | ins | lep1 |  | Rat white adipose tissue (9); Human subjects (269) |
| insulin | ins | klt1 |  | COS-7 cells (270) |
| insulin | ins | egf1 |  | C57BL/KsJ mice (271); Mice (145) |
| insulin | ins | et11 |  | Human subjects (272) |
| insulin | ins | grh1 |  | GnRH expressing cell line (273) |
| insulin | ins | and0 |  | Bovine adipocytes (274); Human subjects (275) |
| insulin | ins | nox1 |  | Bovine endothelial cells (276); Human subjects (277) |
| insulin | ins | gmo1 |  | Rats (278) |
| insulin action | ina | pgl0 |  | Rats (279); Rats (238) |
| insulin action | ina | gng0 |  | Bovine (207); Mice (280); Mice (281) |
| insulin action | ina | msl1 |  | Human muscle tissue(282) |
| insulin action | ina | ost1 |  | Mice (283); Mice and cell lines (284) |
| insulin action | ina | adp1 |  | Mouse embryonic fibroblasts (285); Mice (286) |
| insulin action | ina | tri1 |  | Rats (287); Mice (288) |
| keto acids | ktg | cfn1 |  | Rats (289) |
| keto acids | ktg | ins1 |  | Pancreatic beta cells(290); Rat pancreatic islets (291) |
| Keto acids | ktg | inr0 |  | Mammalian cell culture (292) |
| klotho gene | klt | fty0 |  | Mice (293); Mice (294) |
| klotho gene | klt | ina0 |  | Mice (295); Mice (296) |
| klotho gene | klt | aox1 |  | Mice (297) |
| klotho gene | klt | ang1 |  | Mice (298) |
| klotho gene | klt | inr0 |  | KM mice (299); Mice (300) |
| klotho gene | klt | adp1 |  | Mouse 3T3-L1 cells (301); Mice (295) |
| klotho gene | klt | ins1 |  | MIN6 beta cells (302) |
| leptin | lep | inr1 |  | Human adipocytes (10) |
| leptin | lep | car1 |  | Wistar rats (70); Sprague-Dawley rats (303); Rats (304) |
| leptin | lep | ffa0 |  | Rats (305) |
| leptin | lep | ang1 |  | HUVECs and PAECs (306); Normal HUVECs and HCASMCs (307); Rats and human endothelial cells (308); Wistar rats (309) |
| leptin | lep | cfn1 |  | Mice (310) |
| leptin | lep | ser1 | ? | Black Swiss mice (311) |
| leptin | lep | ser0 | ? | Mice (312) |
| leptin | lep | et11 |  | Rat portal vein (313);HUVECs (314) |
| leptin action | lpa | fdi0 |  | Rats (304); Mice (315); Rat pancreatic islets (316); Wistar rats (317); Rats (318) |
| leptin action | lpa | adp0 |  | Mice (315); Mice (319); Wistar rats (317) |
| leptin action | lpa | tri0 |  | Mice (315); Rat pancreatic islets (316) |
| melatonin | mlt | agr1 |  | Syrian hamsters (320) |
| melatonin | mlt | ost1 |  | MC3T3 cells (321); Osteoblast-like cell line (322) |
| melatonin | mlt | ocl1 |  | MC3T3 cells (321) |
| melatonin | mlt | adp0 |  | Rats (323); Sprague-Dawley rats (324); Sprague-Dawley rats (325); osteoblast-like cell line(322) |
| melatonin | mlt | lep0 |  | Rats (326); Rats (327) |
| melatonin | mlt | ins0 |  | Rats (323); Rats (326); Sprague-Dawley rats (324); Rats (327) |
| melatonin | mlt | pgl0 |  | Sprague-Dawley rats (325) |
| melatonin | mlt | tri0 |  | Sprague-Dawley rats (325); Rats (327) |
| melatonin | mlt | ina1 |  | Rats (328); SAMP8/SAMR1 mice (329); Mice (330); Mice (331); Rats (332) |
| melatonin | mlt | msl1 |  | Rats (333); Rats (334) |
| muscle strength | msl | agr1 |  | Human subjects (335) |
| muscle strength | msl | ina1 |  | Human subjects (335) |
| muscle strength | msl | inr0 |  | Human subjects (252) |
| myostatin | myo | msl0 |  | Mice (336); Mice (337); Mice (338); Mice (339); Sprague-Dawley rats (340); Mice (341) |
| myostatin | myo | ina0 |  | C57BL/6 mice (342); Human subjects (343); Mice (339); C57BL/6 (B6) mice (344) |
| myostatin | myo | tnf1 |  | C57BL/6 (B6) mice (344) |
| myostatin | myo | adp1 |  | Mice(339); Mice (341); C57BL/6 (B6) mice (344); C57BL/6 mice (342) |
| NGF | ngf | bdn1 |  | Human and rat pancreatic islets (345); CD-1 mice (141) |
| NGF | ngf | noc1 |  | Dogs (346); Lewis rats (347); Human subjects (348) |
| NO | nox | vdl1 |  | Human subjects (349); Human subjects (277) |
| NO | nox | ang1 |  | Mice (350); Mice (262) |
| NO | nox | nep0 |  | Wistar rats (351) |
| NO | nox | dop0 |  | Wistar rats (351) |
| NO | nox | agr1 | ? | Mice (352); Mice (353) |
| NO | nox | agr0 | ? | Mice (354); Mice (355); Mice (356); Mice (357) |
| norepinephrine | nep | agr0 |  | Sprague-Dawley rats (128) |
| norepinephrine | nep | ina0 |  | Hamsters (358) |
| norepinephrine | nep | crh1 |  | Rats (359) |
| oestrogen | otg | hgh1 |  | Human subjects (360); Rat osteosarcoma cells (UMR 106.01) (361); Human subjects (362) |
| oestrogen | otg | ina1 | ? | Human subjects (363); Rats (364) |
| oestrogen | otg | ina0 | ? | Human subjects (365) |
| oestrogen | otg | fdi0 |  | C57BL/6J and Swiss Webster mice (366) |
| oestrogen | otg | agr1 |  | Rats (367); Rats (368); California mice (369); CD-1 mice (370); C57BL/6J mice (371); C57BL/6J mice (372); C57BL/6J mice (373) |
| oestrogen | otg | ang1 |  | Human endometrial cells and HMMECs (374); BALB/c mice (375); Mouse mammary tumour explants (376); HUVECs and murine model (377) |
| oestrogen | otg | inr0 | ? | In vitro (378) |
| oestrogen | otg | inr1 | ? | BALB/c mice (375) |
| oestrogen | otg | gmo0 |  | Colon muscle cells (379) |
| oestrogen | otg | ocl1 |  | Human subjects (380) |
| oestrogen | otg | fty1 |  | Holtzman strain rats (381) |
| bone strength | ost | ocl1 |  | Normal human bone cells (382) |
| osteocalcin | ocl | ina1 |  | Mice (383); C57BL/6J mice (384) (385) |
| osteocalcin | ocl | ins1 |  | Mice (383); C57BL/6J mice (384) |
| osteocalcin | ocl | and1 |  | Mice (383); C57BL/6J mice (384) |
| osteocalcin | ocl | tet1 |  | 129-Sv mice (386); Mice (387) |
| osteocalcin | ocl | glp1 |  | STC-1 cells and C57BL/6J mice (388) |
| oxytocin | oxy | agr1 | ? | Wistar rats (389); Mice (390) Prairie voles (391) |
| oxytocin | oxy | agr0 | ? | Wild type Groningen rats (392) |
| oxytocin | oxy | cts1 | ? | Wistar rats (393) |
| oxytocin | oxy | cts0 | ? | Sprague-Dawley rats (394); Human subjects (395) |
| oxytocin | oxy | adp0 |  | Mice (396); Mice (397) |
| oxytocin | oxy | fdi0 |  | C57BL6 mice (398) |
| oxytocin | oxy | gng1 |  | Rat hepatocytes (57) |
| oxytocin | oxy | glg1 |  | Dogs (399) |
| oxytocin | oxy | noc0 |  | Sprague-Dawley rats (400) |
| plasma glucose | pgl | ins1 |  | Human subjects (401) |
| plasma glucose | pgl | ata1 |  | Human subjects and HUVECs (2) |
| plasma glucose | pgl | ghr0 |  | Human subjects (402) |
| plasma glucose | pgl | bgl1 |  | Human subjects (403) |
| plasma glucose | pgl | glg0 |  | Mongrel dogs (404) |
| plasma glucose | pgl | gt10 |  | Large White pigs (405); Rats (208) |
| brain glucose | bgl | cfn1 |  | Logic |
| brain glucose | bgl | fdi0 |  | C57BL/6NHsd mice (406); Rats (407) |
| sfrp5 | sfr | adp0 | ? | Mice (408) |
| sfrp5 | sfr | adp1 | ? | Mice (12) |
| sfrp5 | sfr | inr0 |  | Mice (408) |
| serotonin | ser | cfn1 |  | Mice (409); Human subjects (410); Human subjects (411); Rats (412); ICR mice (413); Marmoset monkeys (414); Wistar rats (415) |
| serotonin | ser | ina0 |  | Hamsters (358); C57BL/6 mice (416); Naïve rat hepatoma cells (417); Pigs (418) |
| serotonin | ser | ost0 |  | Mice (419); Human subjects (420); Human subjects (421); Mice (422) |
| serotonin | ser | agr0 |  | Human subjects (423); Rats (424); Mice (425); C57BL/6J mice (354); Human subjects (426); Human subjects (427); Dogs (428); Vervet monkeys (429); Human subjects (430); Dogs (431); Mice (432) |
| serotonin | ser | inr1 |  | C57BL/6 mice (433); Mice (434); HT-29 colon epithelial cells (435); Mice (436); C57BL/6J mice (437) |
| serotonin | ser | fdi0 |  | Wistar rats (438); Mice (439); Mice (440); Mice (441); Human subjects (442) |
| serotonin | ser | dop0 |  | Rats (443) |
| symapathetic stimulation | sys | gng1 |  | Rats (206) |
| symapathetic stimulation | sys | ina1 |  | Human subjects (444) |
| symapathetic stimulation | sys | adp0 |  | Sprague-Dawley rat (445); Human subjects (446) |
| sympathetic stimulation | sys | egf1 |  | Human subjects (447) |
| testosterone | tet | edp0 |  | Rats (448) |
| testosterone | tet | msh0 |  | Rats (448) |
| testosterone | tet | egf1 |  | Mice (449); Mice (145) |
| testosterone | tet | myo0 |  | C57BL6J mice (450) |
| testosterone | tet | msl1 |  | Human subjects (451); Human subjects (452) |
| testosterone | tet | ocl1 |  | Human subjects (380) |
| testosterone | tet | adp0 |  | Human subjects (453); Human subjects (454); Rats (455); Human subjects (456); Human subjects (457) |
| testosterone | tet | dip0 |  | Logic |
| testosterone | tet | aox1 |  | Cerebellar granule cells (458) |
| testosterone | tet | epo1 |  | Human subjects (459) |
| testosterone | tet | agr1 |  | Mice (355); Rats (367); Rats (368); CD-1 mice (370) |
| testosterone | tet | ina1 | ? | Human subjects (457); Human subjects (453) |
| testosterone | tet | ina0 | ? | Rat skeletal muscle culture (460) |
| testosterone | tet | ang1 |  | Sprague-Dawley rats (461) |
| TNF alpha | tnf | inr1 |  | Mice (462) |
| TNF alpha | tnf | ina0 |  | Murine 3T3-L1 or 3T3-F442A cells (463); Human adipose tissue (249) |
| TNF alpha | tnf | ata1 |  | Human leucocytes (464); C57BL6/J mice (465) |
| TNF alpha | tnf | il61 |  | SCID-HuRAg mice (466); LS14 cell culture (467) |
| TNF alpha | tnf | lep1 |  | C57BL/6J mice (468); Human subjects (469); C3H/HeOuJ mice (470); Syrian hamsters (120); C57BL/6 mice (121) |
| TNF alpha | tnf | klt0 |  | C57/BL6 mice (125); Mice and mouse embryonic adipocytes (471) |
| TNF alpha | tnf | et11 |  | Bovine aortic endothelial cells (472) |
| TNF alpha | tnf | nep0 |  | Rats (473) |
| triglycerides | tri | adp1 |  | C57BL6 mice(474) |
| triglycerides | tri | ina0 |  | C57BL6 mice(474) |
| vasodilation | vdl | bgl1 |  | Logic |
| vasodilation | vdl | ina1 |  | Sprague-Dawley rats (475) |
| vitamin D3 | vd3 | ina1 |  | Human subjects (476); Rats (477) |
| vitamin D3 | vd3 | ost1 |  | Human subjects (478) |
| vitamin D3 | vd3 | agr1 |  | Mice (479) |
| vitamin D3 | vd3 | ins1 |  | Rat pancreas (480); Rats (477) |
| Vitamin B12 | v12 | igf1 |  | Mice (223) |
| Vitamin B12 | v12 | inr0 |  | Mice (481) |
| Vitamin B12 | v12 | hgh1 |  | Mice (223) |
| Vitamin B12 | v12 | ost1 |  | Mice (223) |
| Vitamin B12 | v12 | noc0 |  | Mice (481) |
| Exercise | exe | adp0 |  | OM and S5B/P1 rats (482) |
| Exercise | exe | il61 |  | Humans(483) |
| GLP-1 | glp | ins1 |  | Rat pancreatic ductal cells (484); Human subjects (485) |
| GLP-1 | glp | btc1 |  | Human islets (486); Rat pancreatic ductal cells (484) |
| GLP-1 | glp | glg0 |  | Wistar rats (487) |
| GLP-1 | glp | gmo0 |  | Human subjects (488) |
| GLP-1 | glp | fdi0 |  | Human subjects (488) |
| GLP-1 | glp | ina1 |  | Human subjects (488) |
| GLP-1 | glp | ost1 |  | Human subjects (489); Sprague-Dawley rats (490) |
| Gut Motility | gmo | glp1 |  | Logic |
| Nociception | noc | ina0 |  | Human subjects (491) |

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