

Supplemental table 2. Biological functions activated in DA rats compared with congenic strains.

	Functions activated in DA (number of genes affected) ^A
cell migration and proliferation	proliferation of cells (241), muscle cells (36)
	quantity of cells (145), blood cells (112), mononuclear leukocytes (79), lymphocytes (76), T lymphocytes (56), helper T lymphocytes (23)
	cell movement (177) of leukocytes (88), phagocytes (71), myeloid cells (69), granulocytes (49), mononuclear leukocytes (48), neutrophils (45)
	migration of cells (164), leukocytes (97), phagocytes (43), mononuclear leukocytes (34), myeloid cells (23), granulocytes (22), neutrophils (20), tumor cells (20)
	invasion by cells (70), tumor cells (22), epithelial cell lines (7)
	homing of cells (60), leukocytes (46)
	chemotaxis of cells (57), leukocytes (42), myeloid cells (40), phagocytes (39), granulocytes (28), neutrophils (26)
	recruitment of cells (46), leukocytes (44), phagocytes (37), myeloid cells (30), granulocytes (28), neutrophils (26)
	adhesion of blood cells (52), immune cells (47), phagocytes (21), granulocytes (19), neutrophils (14)
	binding of cells (66), leukocytes (29), phagocytes (18), granulocytes (13), neutrophils (11), smooth muscle cells (7)
	cell rolling of granulocytes (9), neutrophils (7)
	cell spreading of blood cells (12), phagocytes (9), neutrophils (8)
	transmigration of leukocytes (17)
	extravasation of myeloid cells (7), granulocytes (6)
	shape change of blood cells (16), leukocytes (14), granulocytes (10)
accumulation of granulocytes (14)	
infiltration of myeloid cells (29), granulocytes (26), neutrophils (23)	
cell function	activation of cells (98), blood cells (81), leukocytes (71), lymphocytes (41), phagocytes (37), T lymphocytes (34), myeloid cells (33), antigen presenting cells (32), macrophages (21)
	function of blood cells (79), leukocytes (77)
	immune response of cells (41), phagocytes (29)
	metabolism of reactive oxygen species (54), eicosanoid (27)
	synthesis of reactive oxygen species (50), eicosanoid (24), leukotriene (11)
	engulfment of cells (35), blood cells (24), myeloid cells (23), phagocytes (22), antigen presenting cells (19)
	phagocytosis of cells (31), blood cells (23), myeloid cells (22), phagocytes (21), antigen presenting cells (18), macrophages (17), red blood cells (9)
	uptake of cells (8)
	response of phagocytes (31), antigen presenting cells (29), myeloid cells (29), granulocytes (20)
	aggregation of cells (31), blood cells (23), blood platelets (20)
cytotoxicity of cells (27), leukocytes (21)	
angiogenesis	development of cardiovascular system (102), blood vessel (87), cardiovascular tissue (36), endothelial tissue (34), endothelial cell (32)
	differentiation of blood cells (62)
	vasculogenesis (68)
disease / disease process	rheumatic disease (108), arthritis (103), experimentally-induced arthritis (25)
	inflammatory response (93), inflammation of organ (74), inflammation of respiratory system component (38)
	hypersensitive reaction (75), delayed hypersensitive reaction (27), hypersensitivity reaction type II (4)
	lung tumor (58), mammary tumor (83)
other vascular disease (75), dermatitis (50), atherosclerosis (47), damage of liver (26), damage of kidney (15)	

Functions inhibited in DA (number of genes affected) ^B	
lipid	quantity of adiponectin (9)
metabolism	metabolism of acylglycerol (21), triacylglycerol (19)
detoxification	joining of glutathione (7)
development	breakage of blood vessel (5)
disease	disease process infection of mammalia (47), obesity (47), mortality (19)

^A z-scores = 2.00 to 4.35; p-values = 8.02×10^{-5} to 2.55×10^{-22}

^B z-scores = -2.11 to -3.40; p-values = 3.77×10^{-5} to 1.71×10^{-10}