

Table 1. Top 5 differentially expressed genes in pig internal organs responding to clenbuterol stimulation

	GenBank Access No. (Clone No. on Microarray)	Description	Tissue & Fold change
Liver	X64330 (rpfat_13923)	mRNA for ATP--citrate lyase	47.0 ↑
up-regulated	AF078845 (rpfat_18888)	16.7Kd protein mRNA, complete cds	24.2 ↑
	BE663152 (rpig_3513)	131230 MARC 1PIG cDNA 5', mRNA sequence.	20.6 ↑
	NM_006559 (rpfat_19950)	GAP--associated tyrosine phosphoprotein p62 (Sam68)	17.4 ↑
	U09645 (rpfat_13444)	carnitine palmitoyltransferase II precursor (CPT1) gene, exon 4	14.4 ↑
Liver	NM_001244215.1 (rpfat_19723)	Sus scrofa complement component 5a receptor 1 (C5AR1)	250 ↓
down-regulated	AI620131 (rpfat_18421)	tu92h08.x1 NCI_CGAP_Gas4	16 ↓
	BE749591 (rpfat_9357)	200581 MARC 4BOV Bos taurus cDNA 5, mRNA sequence	10.8 ↓
	C94540 (rpfat_17661)	C94540 Pig back fat Sus scrofa cDNA 5-, mRNA sequence	10.6 ↓
	rpfat_17548	EST	8.4 ↓
Heart	AC087859.3 (rpfat_17654)	Homo sapiens chromosome 3 clone RP11-34L16 map 3p, complete sequence	9.3 ↑
Up-regualted	NM_002690 (rpfat_4251)	polymerase (DNA directed), beta	8.2 ↑
	M27444 (rpfat_19902)	dopamine and cyclic AMP--regulated neuronal	7.9 ↑
	D82025 (rpfat_11835)	antioxidant protein and substrate protein	5.4 ↑
	NM_014887 (rpfat_13409)	hypothetical protein from BCRA2	4.1 ↑
Heart	M84133 (rpfat_15779)	apolipoprotein C--III mRNA, mature peptide	14.6 ↓
down-regulated	Z11742 (rpfat_11443)	mRNA for annexin XI	4.3 ↓

	rpfat_19175	EST	4.17 ↓
	rpfat_4144	EST	4.0 ↓
	AC002558 (rpfat_13841)	chromosome 17, clone hRPC867C24, complete sequence	3.9 ↓
Kindeg up-regulated	U03269 (rpfat_13501)	actin capping protein alpha subunit (CapZ) mRNA, complete cds	25.6 ↑
	BF194223 (rpfat_15994)	246130 MARC 2PIG Sus scrofa cDNA 5-, mRNA sequence	21.4 ↑
	BE014044 (rpfat_13876)	125617 MARC 1PIG Sus scrofa cDNA 5-, mRNA sequence	10.1 ↑
	BF194238 (rpfat_19429)	246149 MARC 2PIG Sus scrofa cDNA 5-, mRNA sequence	10.0 ↑
	rpig_3923	EST	8.9 ↑
Kidney down-regulated	AF086629 (rpfat_4994)	VAMP--associated protein C (VAP--C) mRNA, complete cds	24.5 ↓
	AF210379 (rpfat_15357)	matrix Gla protein mRNA, complete cds	20.1 ↓
	BF189320 (rpfat_17014)	234791 MARC 2PIG cDNA 5', mRNA sequence.	10.3 ↓
	AK001067 (rpigfat_7105)	cDNA FLJ10205 fis, clone HEMBA1004954	9.4 ↓
	L09113 (rpig_4013)	glycoprotein IIa mRNA, complete cds	8.8 ↓
Lung up-regulated	AI410830 (rpfat_16271)	EST239123 Normalized rat heart, Bento Soares cDNA clone	125.4 ↑
	M80534 (rpfat_19655)	succinyl--CoA:alpha--ketoacid coenzyme A transferase mRNA,	18.3 ↑
	AC087859.3 (rpfat_17633)	Homo sapiens chromosome 3 clone RP11-34L16 map 3p, complete sequence	13.3 ↑
	rpig_1914.y2	EST	12.9 ↑
	AB011118 (rpfat_16547)	mRNA for KIAA0546 protein, partial cds	12.3 ↑
Lung down-regulated	AL133344 (rpfat_10954)	DNA sequence from clone RP5--1158H2 on chromosome Xp11.23--11.4.	30.3 ↓

rpfat_11877:

TTATAAAGAAGTTGATTTATAGCTGATGTAGTTAAAAGTTATTGCACATTTACTTGATTGTCTACTAT
GTATGTTTGCAGGATTATTTATAAACTTTGTATGATCTTAAGTTTTTTCAAACACTACATTTTTTATGTG
TGCAAGGTGAAAATAAACTTATTTGCCTGATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAACTCGAGGGGG

rpfat_19175:

GCACGAGGCTGAACCTATCCATTGCCTCCTTCTCTCAGAAAACACACTGAGCATCCTGGGAATAGCA
GCCTGCTCACACGGAAGAAAGAGACAGCAAATATTCAAATCCCACACCAAAAATAAAAAGTAACC
CCCTCCAAAAAAAAAATACAAAGGGTTATT

rpfat_4144:

GCACGAGGTTTTTTTTTTTTATGTTACAAACCTTTTTGAAAAGATTAAGGAGCTATTTTTAGGTAAC
TGATTAAAAAAACCTTTATTGCTTAACCTTGCTCAATTGTGAAAATTTATTCCACAAAACACAAATTA
GGCTGGCATAACAGAACCAGAAAGCTCCTATAAGGTAATTTATTGCCTAAGATATCGATTTTTCTTTA
AGCATATAGATATACCTTGTTTCTCCTTAAATGTGTAAACATCTTCTGTTGAGGACTTACTTGAAAT
CCCAAGCAAAGACTTGAGGATCAAAAACAAATGCAACTTTGTTTTTTTTTAAGGACCAAGACCT
CAGTGTTACAGCTGTTTTTGTCTCTGCTGGAAAATGGGGAGTCTTTTAAAAGGAGTAACAAGGTGA
GGATGGAAGGAGGGAGGCAGGTCTTTGACCTTTGGGGGAAAGGAAGGACAAGGGTTCTGATAGCAA
GGGGAC