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Lactobacillus salivarius = 116 acid tolerance DEGs (93.54% in relation to the total number of acid tol

Function	Protein name
Cell envelope biogenesis	D-alanine--poly(phosphoribitol) ligase subunit 2
Cell envelope biogenesis	dTDP-4-dehydrorhamnose 3,5-epimerase
Cell envelope biogenesis	dTDP-glucose 4,6-dehydratase
Cell envelope biogenesis	N-acetylglucosamine-6-phosphate deacetylase
Cell envelope biogenesis	xanthine phosphoribosyltransferase
Cell division	cell division protein
Cell division	cell division protein GpsB
Cell division	cell division protein
Cell division	chromosome condensation protein CrcB
Cell division	chromosome condensation protein CrcB
DNA	transposase
DNA	transposase
Production of energy	F0F1 ATP synthase subunit A
Production of energy	F0F1 ATP synthase subunit C
Production of energy	ATP synthase subunit b
Production of energy	ATP synthase subunit delta
Production of energy	ATP synthase subunit alpha
Production of energy	ATP synthase subunit gamma
Production of energy	ATP synthase subunit beta
Production of energy	ATP synthase epsilon chain
Production of energy	malate permease
Proteins repair	co-chaperone GrpE
Proteins repair	molecular chaperone DnaJ
Proteins repair	cold-shock protein
Proteins repair	ATP-dependent Clp protease proteolytic subunit
Proteins repair	molecular chaperone GroES
Proteins repair	molecular chaperone GroES
Proteins repair	molecular chaperone DnaK
Proteins repair	molecular chaperone GroEL
Proteins repair	trigger factor
Signal transduction	DNA-binding response regulator
Translation and biogenesis	elongation factor G
Translation and biogenesis	30S ribosomal protein S14
Translation and biogenesis	peptide deformylase
Translation and biogenesis	30S ribosomal protein S7
Translation and biogenesis	50S ribosomal protein L20

Translation and biogenesis	elongation factor Ts
Translation and biogenesis	50S ribosomal protein L33
Translation and biogenesis	transcription termination factor NusA
Translation and biogenesis	translation initiation factor IF-2
Translation and biogenesis	ribosome-binding factor A
Translation and biogenesis	30S ribosomal protein S20
Translation and biogenesis	30S ribosomal protein S15
Translation and biogenesis	peptide-methionine (S)-S-oxide reductase
Translation and biogenesis	tRNA-specific 2-thiouridylase
Translation and biogenesis	30S ribosomal protein S1
Translation and biogenesis	50S ribosomal protein L27
Translation and biogenesis	30S ribosomal protein S4
Translation and biogenesis	SsrA-binding protein
Translation and biogenesis	50S ribosomal protein L10
Translation and biogenesis	50S ribosomal protein L3
Translation and biogenesis	50S ribosomal protein L4
Translation and biogenesis	50S ribosomal protein L23
Translation and biogenesis	30S ribosomal protein S19
Translation and biogenesis	50S ribosomal protein L22
Translation and biogenesis	30S ribosomal protein S3
Translation and biogenesis	50S ribosomal protein L16
Translation and biogenesis	50S ribosomal protein L29
Translation and biogenesis	30S ribosomal protein S17
Translation and biogenesis	MULTISPECIES: 50S ribosomal protein L14
Translation and biogenesis	50S ribosomal protein L24
Translation and biogenesis	50S ribosomal protein L5
Translation and biogenesis	30S ribosomal protein S8
Translation and biogenesis	50S ribosomal protein L6
Translation and biogenesis	50S ribosomal protein L18
Translation and biogenesis	30S ribosomal protein S5
Translation and biogenesis	50S ribosomal protein L30
Translation and biogenesis	50S ribosomal protein L15
Translation and biogenesis	30S ribosomal protein S13
Translation and biogenesis	MULTISPECIES: 30S ribosomal protein S11
Translation and biogenesis	50S ribosomal protein L17
Translation and biogenesis	30S ribosomal protein S6
Translation and biogenesis	asparagine--tRNA ligase
Translation and biogenesis	peptide deformylase
Translation and biogenesis	aspartyl/glutamyl-tRNA amidotransferase subunit A
Translation and biogenesis	MULTISPECIES: translation initiation factor IF-1
Translation and biogenesis	50S ribosomal protein L2
Translation and biogenesis	50S ribosomal protein L31 type B
Translation and biogenesis	MULTISPECIES: 50S ribosomal protein L36
Translation and biogenesis	30S ribosomal protein S16
Translation and biogenesis	elongation factor Tu
Transport of aminoacids	amino acid ABC transporter permease

Transport of aminoacids	glutamine synthetase
Transport of aminoacids	glutamine synthetase
Transport of aminoacids	diaminopimelate decarboxylase
Transport of aminoacids	polar amino acid ABC transporter permease
Transport of aminoacids	aminopeptidase C
Nucleotide transport	glutamine amidotransferase
Nucleotide transport	adenylosuccinate lyase
Nucleotide transport	uracil phosphoribosyltransferase
Nucleotide transport	phosphoribosylformylglycinamidine synthase
Nucleotide transport	phosphoribosylformylglycinamidine synthase subunit PurQ
Nucleotide transport	phosphoribosylamine--glycine ligase
Nucleotide transport	uridine kinase
Nucleotide transport	uracil transporter
Nucleotide transport	cytidylate kinase
Nucleotide transport	NUDIX hydrolase
Nucleotide transport	adenine phosphoribosyltransferase
Nucleotide transport	ribonucleotide-diphosphate reductase subunit alpha
Nucleotide transport	nicotinate phosphoribosyltransferase
Nucleotide transport	transcription elongation factor GreA
Nucleotide transport	GMP synthase
Nucleotide transport	adenylate kinase
Nucleotide transport	phosphoribosylaminoimidazole carboxylase
Nucleotide transport	uracil phosphoribosyltransferase
Nucleotide transport	xanthine phosphoribosyltransferase
Nucleotide transport	xanthine permease
Nucleotide transport	uridylate kinase

rance associated genes)

Gene	log2FoldChange	pvalue
HMPREF0545_RS04540	7,800,808,586	2.22E-01
HMPREF0545_RS07695	8,601,827,663	6.95E-02
HMPREF0545_RS07700	7,405,074,331	1.27E-03
HMPREF0545_RS08235	7,548,053,226	2.24E-02
HMPREF0545_RS09340	779,699,951	2.54E+00
HMPREF0545_RS03700	9,976,712,692	1.71E-04
HMPREF0545_RS04265	9,500,025,662	1.79E-03
HMPREF0545_RS05280	9,503,911,775	1.72E-03
HMPREF0545_RS08200	6,910,300,997	0.000437795
HMPREF0545_RS08205	6,614,785,087	0.000526706
HMPREF0545_RS03505	840,705,425	1.41E-01
HMPREF0545_RS06465	8,915,084,188	1.14E-02
HMPREF0545_RS03375	8,577,566,375	2.99E-05
HMPREF0545_RS03380	8,310,206,117	2.99E-01
HMPREF0545_RS03385	9,710,929,282	5.79E-04
HMPREF0545_RS03390	920,194,671	6.12E-03
HMPREF0545_RS03395	6,803,276,958	3.06E-13
HMPREF0545_RS03400	1,004,123,391	9.30E-05
HMPREF0545_RS03405	7,541,455,159	1.92E-12
HMPREF0545_RS03410	9,298,365,049	3.61E-03
HMPREF0545_RS09325	7,863,743,842	2.28E+00
HMPREF0545_RS03295	8,138,983,854	6.72E-04
HMPREF0545_RS03305	8,894,158,792	1.97E-06
HMPREF0545_RS05380	7,513,280,607	4.48E+00
HMPREF0545_RS05890	4,666,700,245	1.51E-01
HMPREF0545_RS06020	8,095,031,624	5.73E-01
HMPREF0545_RS07000	818,150,593	6.84E-01
HMPREF0545_RS03300 (DNAK)	5,899,067,459	7.63E-10
HMPREF0545_RS06015 (groEL)	4,867,280,031	2.21E-03
HMPREF0545_RS03630 (tig)	1,077,415,027	1.14E-06
HMPREF0545_RS00450	8,083,627,786	7.73E-01
HMPREF0545_RS01195	7,735,028,018	4.44E+00
HMPREF0545_RS01460	8,854,707,152	2.74E-02
HMPREF0545_RS02370	8,550,841,971	6.29E-05
HMPREF0545_RS03025	9,609,644,012	1.01E-03
HMPREF0545_RS05855	810,333,112	6.31E-01
HMPREF0545_RS05960	8,158,443,789	9.15E-01
HMPREF0545_RS06430	9,205,472,126	5.09E-03
HMPREF0545_RS08970	878,348,735	3.53E-02
HMPREF0545_RS01330	7,093,809,987	9.57E+00
HMPREF0545_RS01335	7,342,291,333	9.67E+00
HMPREF0545_RS01915	6,504,177,252	0.001070539
HMPREF0545_RS02390	7,732,334,442	2.41E-05
HMPREF0545_RS02910	7,972,449,881	1.00E-04

HMPREF0545_RS02985	641,656,974	1.04E-05
HMPREF0545_RS03150	7,218,485,239	8.05E+00
HMPREF0545_RS03255	1,017,148,431	6.57E-06
HMPREF0545_RS03270	76,770,553	1.57E-10
HMPREF0545_RS03275	7,839,726,934	1.31E+00
HMPREF0545_RS03600	844,831,939	1.36E-01
HMPREF0545_RS03605	6,420,250,266	1.79E+00
HMPREF0545_RS03880	766,011,293	3.83E+00
HMPREF0545_RS04400	9,333,333,488	3.06E-03
HMPREF0545_RS04525	8,801,393,911	1.36E-07
HMPREF0545_RS04815	8,155,939,645	5.28E-01
HMPREF0545_RS05420	9,569,841,661	1.22E-04
HMPREF0545_RS05825	8,553,154,494	1.16E-01
HMPREF0545_RS06150	9,470,699,858	2.07E-03
HMPREF0545_RS08390	9,400,627,256	1.68E-06
HMPREF0545_RS08395	8,450,108,254	3.33E-07
HMPREF0545_RS08400	887,405,885	2.39E-02
HMPREF0545_RS08410	640,960,141	5.99E-06
HMPREF0545_RS08415	8,446,627,884	2.70E-04
HMPREF0545_RS08420	8,763,748,101	4.07E-11
HMPREF0545_RS08425	830,944,768	2.76E-05
HMPREF0545_RS08430	8,418,763,139	2.10E-01
HMPREF0545_RS08435	671,194,085	1.88E-02
HMPREF0545_RS08440	8,912,094,503	1.63E-05
HMPREF0545_RS08445	9,990,006,752	1.04E-04
HMPREF0545_RS08450	8,320,189,553	1.51E-07
HMPREF0545_RS08460	9,796,592,371	4.62E-05
HMPREF0545_RS08465	1,014,071,466	8.80E-05
HMPREF0545_RS08470	6,629,434,671	6.56E-04
HMPREF0545_RS08475	7,167,297,803	3.01E-03
HMPREF0545_RS08480	564,732,394	8.48E+00
HMPREF0545_RS08485	7,132,219,439	3.30E-03
HMPREF0545_RS08510	9,548,786,003	1.27E-03
HMPREF0545_RS08515	5,822,592,397	2.07E-05
HMPREF0545_RS08525	798,804,754	2.61E-04
HMPREF0545_RS08785	9,190,372,204	6.72E-03
HMPREF0545_RS03865 (asnC)	8,420,993,739	1.61E-05
HMPREF0545_RS03660 (def)	7,353,310,137	0.000109711
HMPREF0545_RS09130 (gatA)	9,981,159,449	1.15E-05
HMPREF0545_RS08500 (infA)	8,433,281,319	3.47E-02
HMPREF0545_RS08405 (rplB)	7,760,462,769	1.84E-09
HMPREF0545_RS01995 (rpmE2)	8,563,326,333	1.24E-01
HMPREF0545_RS08505 (rpmJ)	8,341,539,638	2.35E-01
HMPREF0545_RS03565 (rpsP)	8,706,692,279	7.45E-02
HMPREF0545_RS03625 (tuf)	597,401,108	4.06E-10
HMPREF0545_RS01345	8,835,264,633	2.51E-02

HMPREF0545_RS03195	9,229,298,887	4.21E-04
HMPREF0545_RS03200	1,057,450,929	5.05E-06
HMPREF0545_RS05060	9,569,411,881	1.49E-03
HMPREF0545_RS05350	6,325,074,375	8.21E+00
HMPREF0545_RS06225	9,942,498,184	1.86E-04
HMPREF0545_RS02030	7,652,041,051	2.83E+00
HMPREF0545_RS03010	6,070,716,723	1.36E-01
HMPREF0545_RS03370	6,805,074,697	1.37E-02
HMPREF0545_RS03735	6,752,712,687	0.000431967
HMPREF0545_RS03740	8,016,330,367	9.14E-01
HMPREF0545_RS03770	9,134,804,541	1.05E-02
HMPREF0545_RS04145	9,227,450,742	4.74E-03
HMPREF0545_RS04210	9,515,545,214	1.56E-04
HMPREF0545_RS04590	8,027,584,666	7.07E-01
HMPREF0545_RS04870	7,925,114,604	1.19E+00
HMPREF0545_RS05485	8,275,852,919	3.66E-01
HMPREF0545_RS06125	7,473,418,959	7.62E-06
HMPREF0545_RS06270	9,960,542,219	1.88E-04
HMPREF0545_RS06590	752,895,137	4.78E+00
HMPREF0545_RS06820	8,654,076,229	1.13E-01
HMPREF0545_RS08495	698,523,642	6.54E-04
HMPREF0545_RS09105	9,166,735,422	5.74E-04
HMPREF0545_RS09295	8,754,212,376	4.49E-02
HMPREF0545_RS09340	779,699,951	2.54E+00
HMPREF0545_RS09345	897,859,537	1.83E-02
HMPREF0545_RS03215 (pyrH)	7,927,764,348	1.04E-03