Supplementary Materials

Roles of interacting stress related genes in lifespan regulation: insights for translating experimental findings to humans

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Supplementary Table 1. SNPs whose interaction with rs16970024 SNP were associated with survival trait with *P*-value not exceeding 9.69E-05. Notations: "rsid" is SNP name; "chr" denotes chromosome number; "EA" is an effective allele; "AA" is an alternative allele; "MA" denotes minor allele; "pS" denotes p-value in separate genetic analysis of association of a given SNP with survival trait; "MAF" is a minor allele frequency; gene is used for gene name; "b12" is a beta coefficient characterizing association of the interaction of the rs697221 SNP with a SNP in the "rsid" column with survival trait; "p12" is the p-value of association between interaction of the rs16970024 SNP with a SNP shown in the "rsid" column.

rsid	chr	EA	AA	MA	pS	MAF	gene	b12	p12
rs13023094	2	A	C	C	0.807	0.217	SLC4A1AP	0.6458	3.39E-06
rs4388939	12	A	G	G	0.0223	0.067	FICD	-0.9674	8.27E-06
rs67998788	2	A	G	G	0.13	0.23	2q37.3	0.5781	8.78E-06
rs17447148	1	G	A	A	0.403	0.101	1p31.1	0.8952	9.97E-06
rs1409813	1	G	A	A	0.0214	0.301	TSEN15	-0.5404	1.25E-05
rs2035892	8	G	A	A	0.842	0.103	C8orf37-AS1	0.8204	1.60E-05
rs7550206	1	G	A	A	0.141	0.24	1p22.2	-0.5554	1.67E-05
rs68176631	9	A	G	G	0.909	0.349	LINGO2	-0.5089	1.67E-05
rs2433644	12	C	A	A	0.981	0.385	12p12.1	-0.4841	1.85E-05
rs1876801	2	A	G	G	0.0967	0.134	LOC105373514	0.7545	1.86E-05
rs79742301	21	G	A	A	0.771	0.138	21q22.11	-0.6653	2.52E-05

rs10880841	12	C	A	A	0.0304	0.208	12q12	-0.5531	2.61E-05
rs1317639	3	A	G	G	0.417	0.255	PTPRG	-0.5251	2.71E-05
rs12434716	14	C	G	G	0.299	0.164	NPAS3	0.6714	2.82E-05
rs77323270	15	G	A	A	0.184	0.053	ANPEP	1.0528	2.91E-05
rs7569776	2	G	A	A	0.381	0.431	2q21.1	0.4532	3.01E-05
rs840716	11	C	A	A	0.973	0.053	OR51G1	1.0883	3.08E-05
rs4245284	18	A	G	G	0.885	0.222	18q21.32	0.5612	3.08E-05
rs10512751	5	A	C	C	0.157	0.165	C7	-0.5881	3.24E-05
rs11973636	7	G	A	A	0.61	0.392	LOC107986820	-0.4458	3.25E-05
rs12932507	16	T	A	A	0.68	0.104	CDH13	-0.7429	3.32E-05
rs62080360	17	G	A	A	0.479	0.114	PGS1	-0.6904	3.41E-05
rs7238337	18	G	A	A	0.0697	0.283	LOC107985165	-0.5043	3.56E-05
rs1475149	6	G	A	A	0.194	0.44	CASC15	-0.4576	3.60E-05
rs7662014	4	G	A	A	0.929	0.104	4p14	-0.756	3.80E-05
rs13042739	20	A	G	G	0.258	0.124	LOC112268271	0.7209	4.13E-05
rs113061187	15	A	G	G	0.684	0.054	SLCO3A1	1.0064	4.29E-05
rs1451758	16	G	A	A	0.341	0.143	LINC02165	0.6378	4.58E-05
rs6975186	7	A	T	T	0.489	0.292	CNTNAP2	-0.4902	5.25E-05
rs6507199	18	A	G	G	0.403	0.253	CELF4	0.5202	5.40E-05
rs731671	20	G	A	A	0.468	0.402	PPP1R16B	0.4386	5.56E-05
rs2175094	2	G	A	A	0.207	0.218	LOC105374382	0.5693	5.65E-05
rs60730012	5	G	A	A	0.808	0.117	LOC105374737	-0.6488	5.99E-05
rs2929965	8	G	A	A	0.0223	0.427	CCN4	0.4742	6.38E-05
rs6790160	3	A	G	G	0.721	0.086	3q13.13	-0.773	6.39E-05
rs11067978	12	A	G	G	0.85	0.144	12q24.21	0.6504	6.43E-05
rs6557452	6	G	A	A	0.978	0.08	LOC101928923	0.8895	6.65E-05
rs10838329	11	G	A	A	0.957	0.264	LINC02704	0.5049	6.75E-05
rs11191157	10	G	A	A	0.455	0.287	ARMH3	-0.4897	6.99E-05
rs1938548	6	G	A	A	0.392	0.11	6q14.1	-0.6792	6.99E-05
rs13153696	5	C	A	A	0.571	0.178	CARMN	0.5903	7.04E-05
rs1118290	9	G	A	A	0.898	0.349	LOC105375951	-0.4617	7.24E-05

rs79529740	12	A	G	G	0.212	0.061	SLCO1B3	-0.9668	7.58E-05
rs2026023	20	A	G	G	0.86	0.266	CDH4	0.5005	7.64E-05
rs7571700	2	G	A	A	0.339	0.116	LOC105373524	0.7046	7.97E-05
rs9526299	13	G	C	C	0.399	0.083	LOC105370195	-0.7844	8.09E-05
rs74196373	10	A	C	C	0.514	0.489	RSU1P1	-0.43	8.09E-05
rs7503232	17	A	G	G	0.247	0.462	LOC107985081	-0.4392	8.34E-05
rs4415205	7	G	A	A	0.809	0.172	7q11.22	-0.559	8.43E-05
rs2031470	1	G	A	A	0.498	0.288	1q25.2	-0.4708	8.62E-05
rs13256463	8	G	A	A	0.0364	0.264	LOC401478	-0.4757	8.83E-05
rs10869692	9	A	G	G	0.0316	0.298	PCSK5	0.4891	9.36E-05
rs806303	13	G	A	A	0.694	0.499	DLEU1	-0.427	9.49E-05
rs11185381	1	A	G	G	0.126	0.183	1p21.1	0.5722	9.51E-05
rs9275653	6	A	G	G	0.498	0.38	LOC102725019	0.4465	9.69E-05

Supplementary Table 2. SNPs whose interaction with rs697221 SNP were associated with survival trait with *P*-value not exceeding 9.97E-05. Notations: “rsid” is SNP name; “chr” denotes chromosome number; “EA” is an effective allele; “AA” is an alternative allele; “MA” denotes minor allele; “pS” denotes *P*-value in separate genetic analysis of association of a given SNP with survival trait; “MAF” is a minor allele frequency; gene is used for gene name; “b12” is a beta coefficient in logistic regression model characterizing association of the interaction of the rs697221 SNP with a SNP in the “rsid” column with survival trait; “p12” is the *P*-value of association between interaction of the rs697221 SNP with a SNP shown in the “rsid” column.

rsid	**chr**	**EA**	**AA**	**MA**	**pS**	**MAF**	**gene**	**b12**	**p12**
rs7926726	11	A	G	G	0.471	0.27	11p11.2	0.43	2.92E-07
rs10439180	2	A	G	G	0.147	0.44	LRP1B	0.3487	4.98E-06
rs36053120	15	G	C	C	0.249	0.07	LINC01578	-0.678	6.91E-06
rs4772715	13	C	A	A	0.212	0.27	13q33.2	0.3772	8.29E-06
rs4867045	5	G	A	A	0.107	0.32	5p13.3	-0.36	9.11E-06
rs77920110	13	A	G	G	0.469	0.05	13q33.2	-0.7799	1.01E-05
rs2853552	7	G	A	A	0.359	0.28	HDAC9	0.3628	1.75E-05

rs3773650	3	C	A	A	0.993	0.19	TGFBR2	-0.3919	2.20E-05
rs7494834	15	G	A	A	0.00236	0.35	DET1	-0.3379	2.36E-05
rs724410	7	A	C	C	0.663	0.09	7q36.3	0.5759	2.37E-05
rs62534655	9	C	A	A	0.721	0.32	PTPRD	0.3428	2.39E-05
rs2143863	20	A	G	G	0.477	0.14	SNRPB	-0.4587	2.64E-05
rs1081025	6	C	A	A	0.719	0.05	6q16.2	0.7313	3.24E-05
rs9615752	22	C	A	A	0.114	0.16	22q13.31	-0.4252	3.60E-05
rs10987235	9	G	A	A	0.205	0.20	9q33.3	-0.3823	4.21E-05
rs76928216	12	A	G	G	0.379	0.06	LOC105369608	0.677	4.67E-05
rs117388418	20	C	G	G	0.491	0.06	SLCO4A1	-0.6526	4.86E-05
rs6430764	2	A	G	G	0.334	0.40	HNMT	0.3146	4.99E-05
rs13042637	20	A	G	G	0.184	0.28	NDUFAF5	0.3533	5.19E-05
rs13152024	4	G	A	A	0.516	0.27	SLC10A7	-0.3406	5.26E-05
rs57355402	6	A	G	G	0.0345	0.11	DNAH8	0.5031	6.07E-05
rs28604945	5	T	A	A	0.00717	0.13	LOC105377750	0.4467	6.29E-05
rs4528714	2	C	A	A	0.702	0.19	SH3BP4	-0.3796	6.41E-05
rs34029367	7	G	A	A	0.172	0.22	ZNF804B	0.3694	6.80E-05
rs526820	19	A	T	T	0.622	0.48	COX7A1	0.3013	6.91E-05
rs1125469	9	A	G	G	0.495	0.48	PRUNE2	0.3019	7.03E-05
rs2333990	17	G	A	A	0.65	0.19	RPTOR	-0.3921	7.23E-05
rs17434150	6	C	A	A	0.885	0.07	ZFAND3	-0.5897	7.24E-05
rs17381941	2	A	C	C	0.409	0.15	LOC107985845	-0.4121	7.40E-05
rs6069746	20	A	G	G	0.579	0.24	CASS4	-0.3476	7.72E-05
rs74144434	1	A	G	G	0.213	0.19	ELK4	-0.3715	7.78E-05
rs1869288	2	A	G	G	0.389	0.12	2p25.1	-0.447	7.91E-05
rs12327122	18	G	A	A	0.343	0.42	18q23	0.3071	7.97E-05
rs3798920	6	A	G	G	0.254	0.085	AGPAT4	0.5404	7.99E-05
rs11804672	1	G	A	A	0.144	0.175	1p36.12	-0.3783	8.46E-05
rs558059	21	C	A	A	0.414	0.316	TIAM1	0.3206	8.54E-05
rs12464157	2	G	A	A	0.013	0.086	CCDC141	-0.529	8.54E-05
rs10446831	4	G	A	A	0.0313	0.131	LOC105377567	-0.4523	8.88E-05

rs10265230	7	G	A	A	0.231	0.181	7q31.31	-0.376	8.90E-05
rs12989816	2	A	G	G	0.605	0.218	2p22.3	-0.3579	8.99E-05
rs72963225	18	A	G	G	0.31	0.154	18q12.1	0.402	9.03E-05
rs13044092	20	G	A	A	0.83	0.192	20p12.1	0.3765	9.21E-05
rs34548235	3	A	C	C	0.386	0.118	STXBP5L	-0.4615	9.41E-05
rs11590511	1	A	C	C	0.806	0.096	1q32.1	-0.5112	9.68E-05
rs638284	18	A	G	G	0.879	0.077	18p11.22	0.581	9.73E-05
rs1543591	10	A	G	G	0.404	0.447	10q26.2	0.2843	9.76E-05
rs34294418	3	T	A	A	0.897	0.14	LINC02026	0.4426	9.97E-05