

Table S1. List of identified proteins that decreased or increased in *EIF4E-3* mutant testes by at least 1.5-fold

	Gene	t-test	Average ratio	Annotation
Decreased in <i>EIF4E-3</i> mutant	CG1979	2.8×10^{-6}	-1.92	Unknown
	CG1516	2.3×10^{-4}	-1.7	Pyruvate carboxylase
	CG4706	0.0006	-1.8	Aconitase dehydratase
	CG6778	4.0×10^{-5}	-2.45	Glycyl-tRNA synthetase
	Pgd	0.0004	-1.76	6-phosphogluconate dehydrogenase
	CG18284	8.9×10^{-5}	-2.09	Lipase
	CG11963	0.0003	-1.87	Succinyl-CoA synthetase
	CG17654	0.0006	-2.3	Enolase
	Hex-A	6.1×10^{-6}	-3.04	Hexokinase
	CG32820	2.0×10^{-7}	-5.78	Teklin (microtubule organization)
	CG5432	0.001	-2.07	Fructose biphosphate aldolase
	CG12020	1.9×10^{-5}	-1.76	Dnaj type chaperone
	CG6058	0.0002	-3.57	Aldolase
	CG10863	0.0009	-1.86	Alditol:NADP ⁺ oxidoreductase
	CG16758	0.0004	-1.79	Inosine-guanosine xanthine phosphatase
	CG11876	0.0007	-1.95	Pyruvate dehydrogenase
	CG4546	0.0004	-1.81	Arginine kinase
Increased in <i>EIF4E-3</i> mutant	Tom70	0.0022	1.91	Mitochondrial transmembrane transporter
	blw	0.0017	1.84	Mitochondrial ATP synthase subunit
	ldh	0.0001	1.72	Isocitrate dehydrogenase
	CG5851	0.0006	4.42	Sds22, protein phosphatase
	CG10749	0.0003	1.51	Malate dehydrogenase
	CG5730	6.4×10^{-5}	1.75	Annexin IX
	Aats-thr	0.0015	1.9	Threonyl-tRNA synthetase