QRIME Scene Investigation

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Contents

1 SampleSheet

Group	PR590	PR622	PR650
ER 0min	127N	127N	128N
ER 45min	128C	127C	128C
ER 90min	129N	128N	129N
FOXA1 0min	129C	129C	129C
FOXA1 45min	130N	130N	130N
FOXA1 90min	130C	130C	130C
IgG	126	126	131

Table 1: Isobaric tags used for each sample (group) and run.

Contrast
ER 45min vs ER 0min
ER 90min vs ER 0min
ER 90min vs ER 45min
FOXA1 45min vs FOXA1 0min
FOXA1 90min vs FOXA1 0min
FOXA1 90min vs FOXA1 45min

Table 2: Configured Constrasts.

2 Peptide intensity data

	PR590	PR622	PR650	All
Peptides	5822	6952	3183	9321
Peptides with no missing values	5702	6872	3118	9179
Proteins	1125	1227	656	1553
Proteins with no missing values	1112	1218	645	1541

Table 3: Numbers of peptides and proteins observed in each run.

Figure 1 shows the distribution of intensities for each sample within each run.

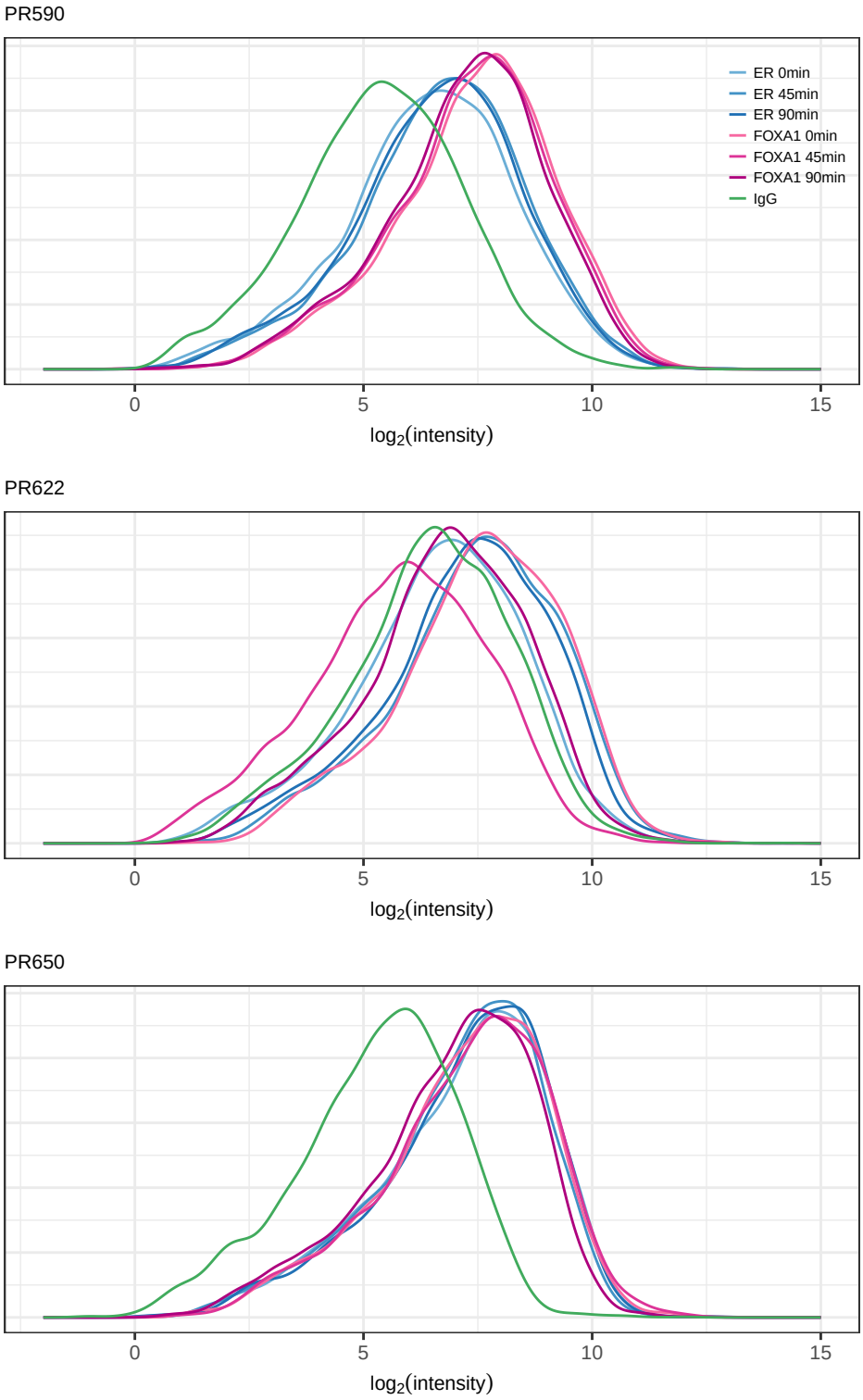

Figure 1: Density plots of intensities from each run.

3 Normalization of intensity data

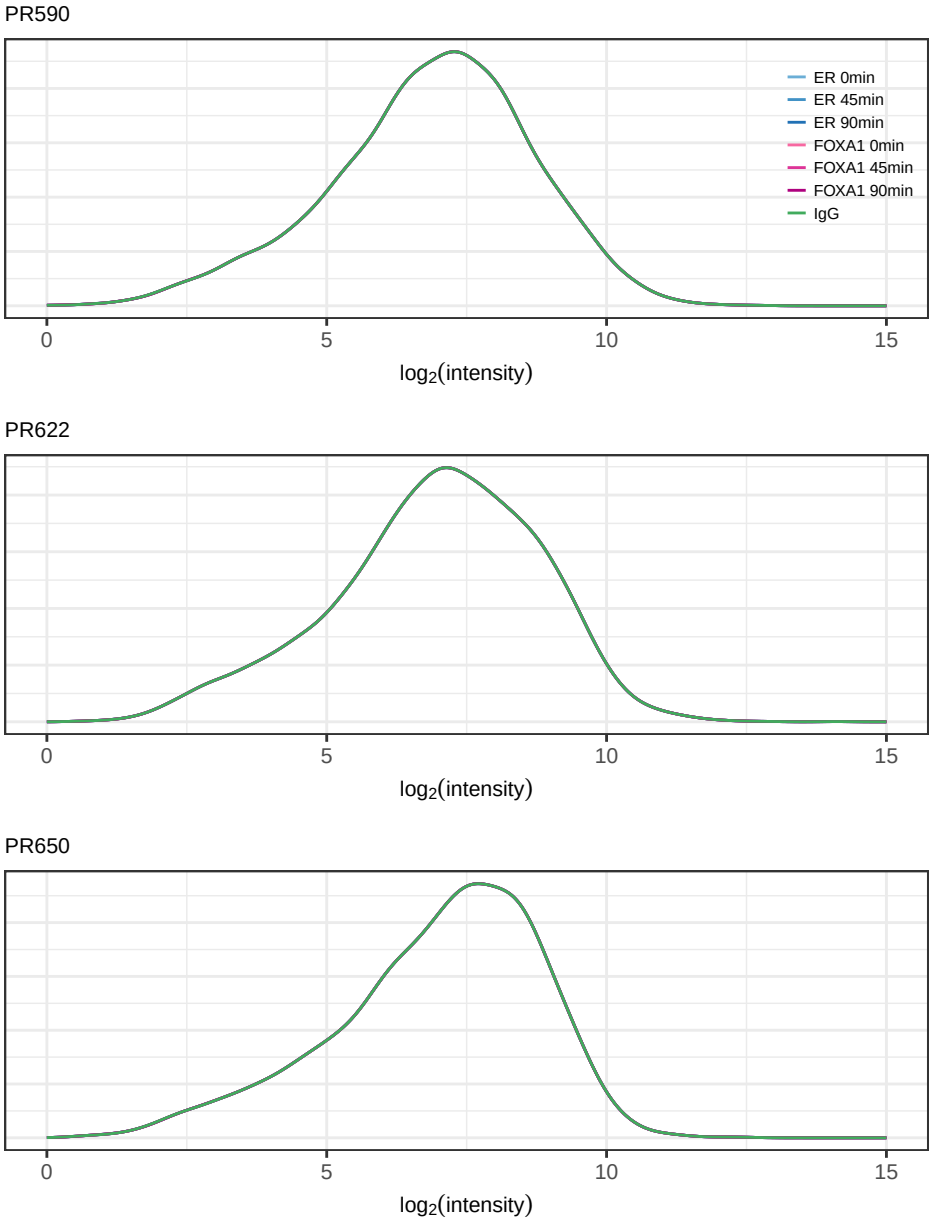

Figure 2: Density plots of normalized intensities from each TMT run where QUANTILE normalization was applied to peptide intensities that include misssing values.

4 Protein-level quantification

Runs/replicates	1	2	3	total
Including missing values	625	401	527	1553
Excluding missing values	625	398	518	1541

Table 4: Numbers of proteins identified in differing numbers of runs and total number of proteins identified in all runs.

5 Principal Component Analysis

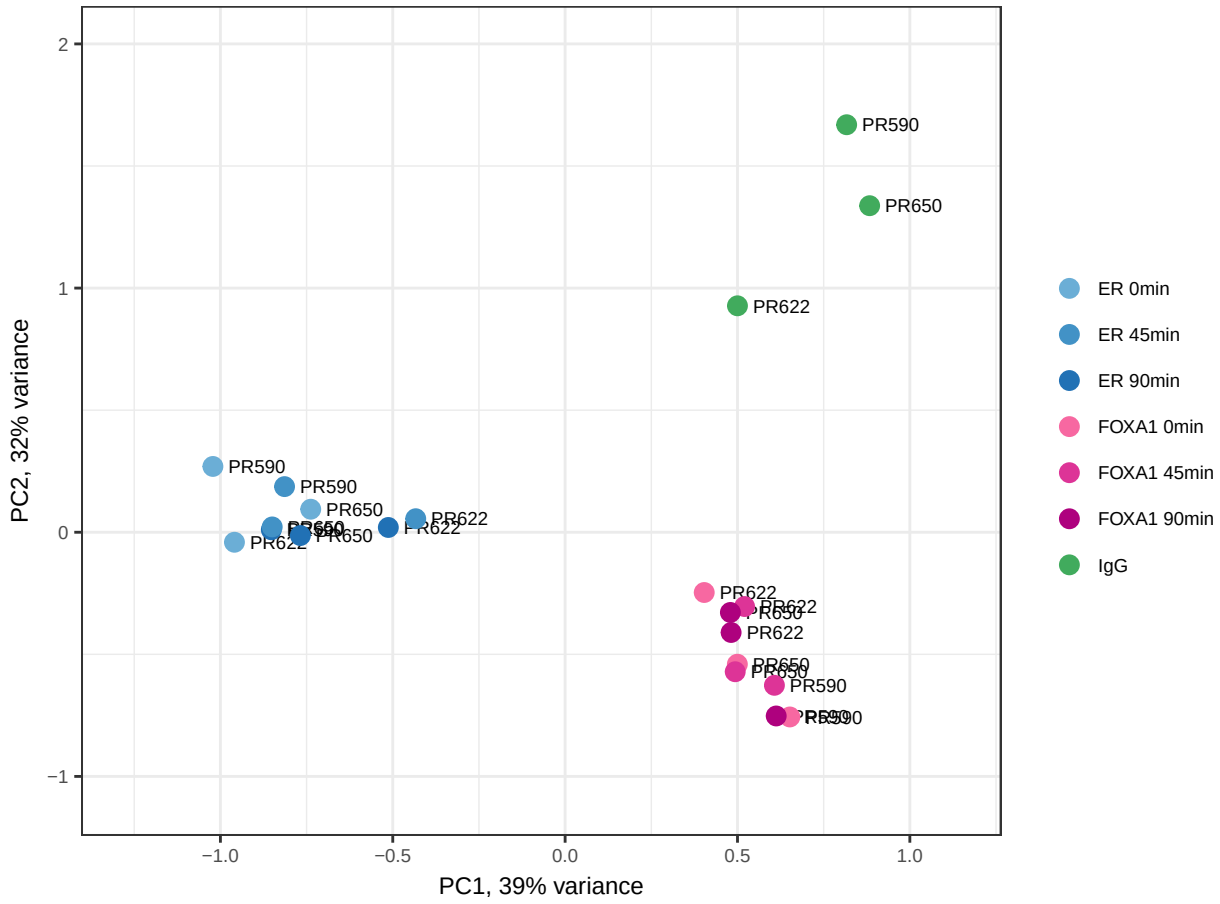

Figure 3: Principal Componenent Analysis for proteins sampled in all 3 runs. The PCA was based on protein-level data resulting from summation of quantile normalized peptide intensities in which missing values were imputed using KNN-based nearest neighbour averaging. The first two principal components are displayed.

6 Differential Binding

6.1 ER 45min vs ER 0min, excluding peptides with missing intensities, quantile normalization

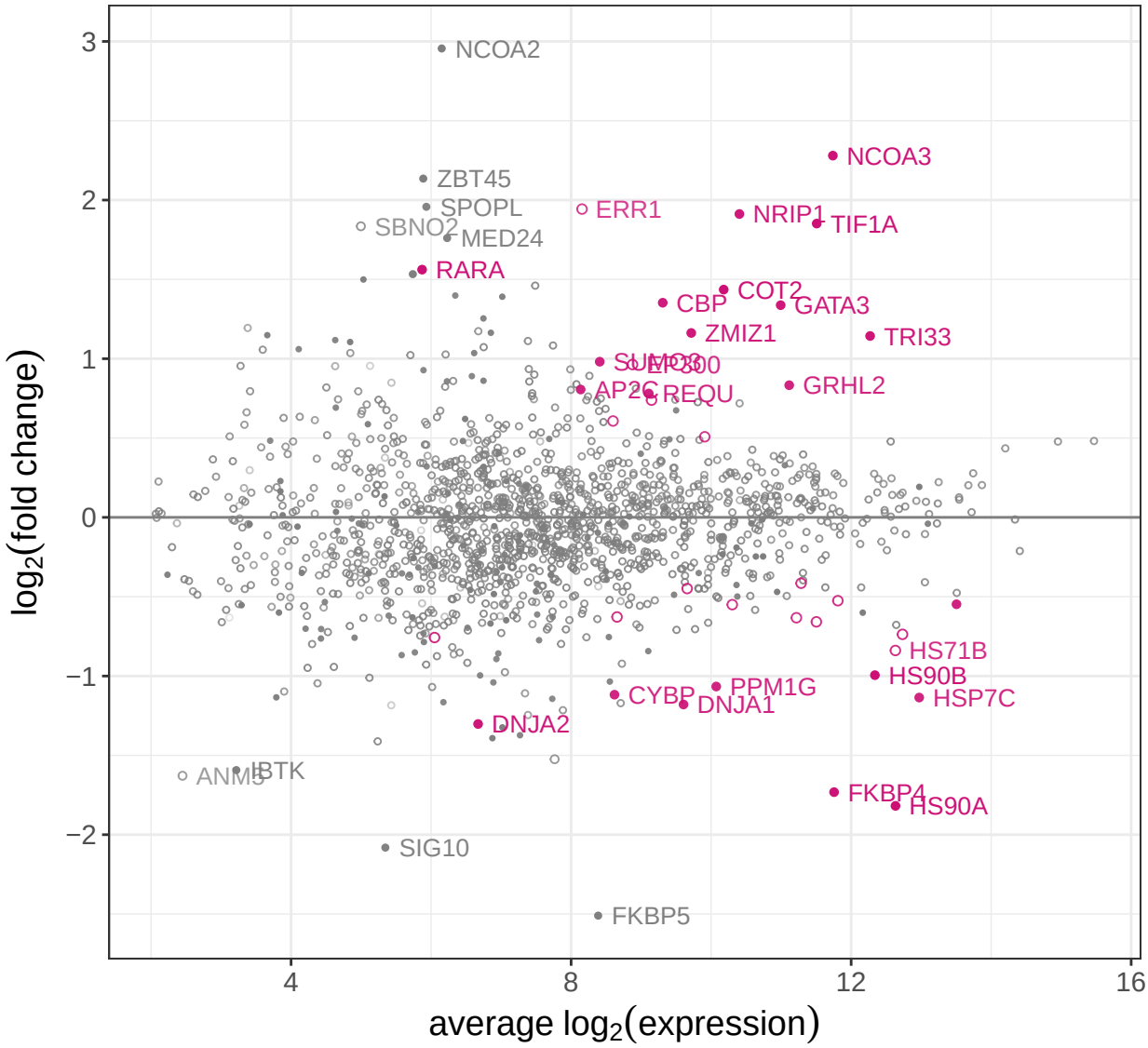

Figure 4: MA plot of the average intensity against $\log_2$ fold change for the ER 45min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization). Top ranking differentially-expressed proteins with false discovery rate below 0.05 are highlighted in pink. Open circles indicate that the protein is non-specific from the IgG control comparison.

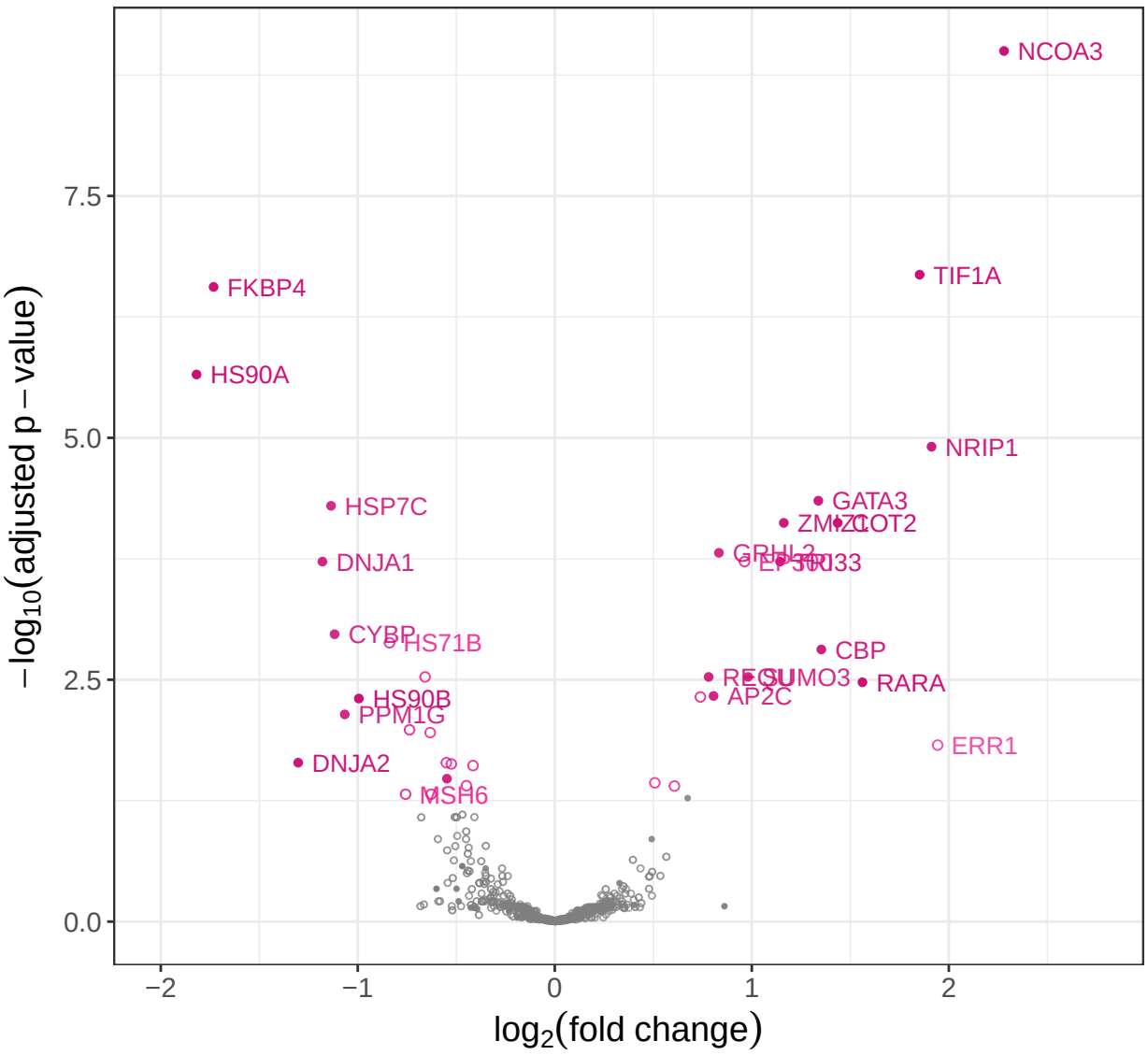

Figure 5: Volcano plot of the average intensity against $\log_2$ fold change for the ER 45min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization). Top ranking differentially-expressed proteins with false discovery rate below 0.05 are highlighted in pink. Open circles indicate that the protein is non-specific from the IgG control comparison.

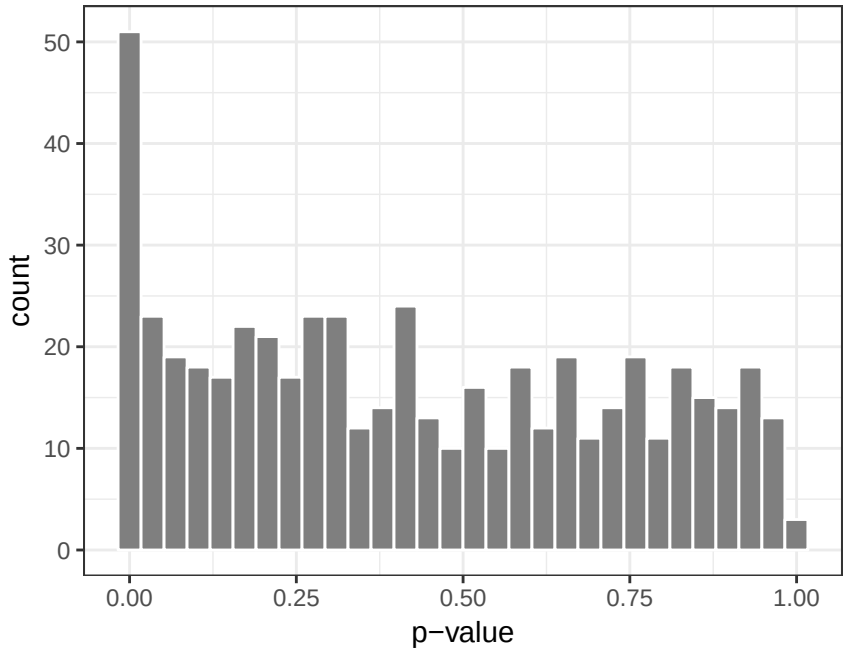

Figure 6: Histogram of p-values for the ER 45min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization)

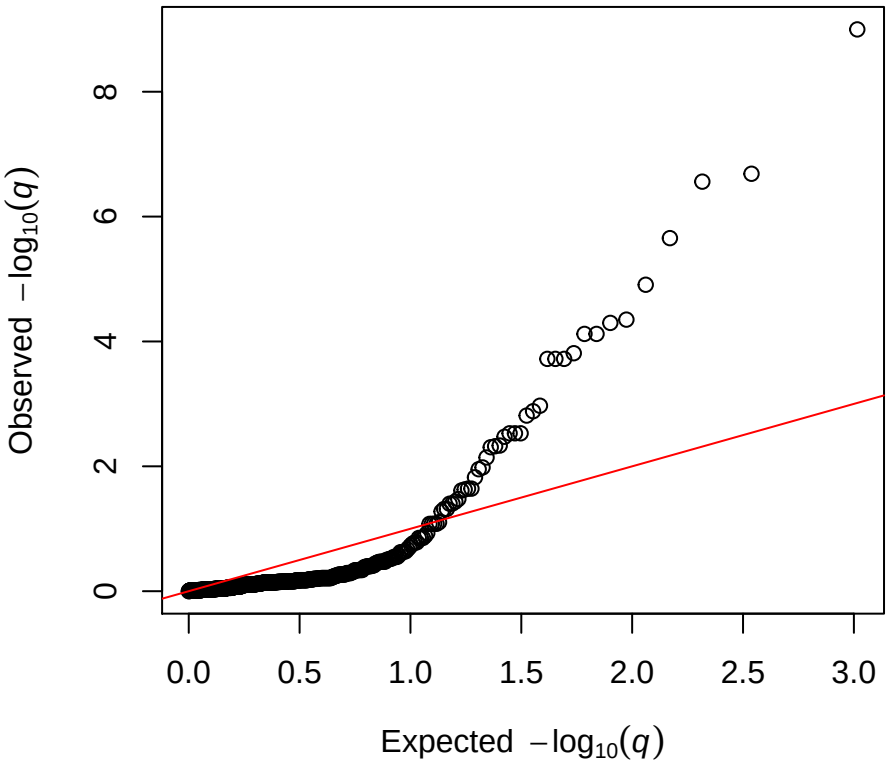

Figure 7: QQ plot of the adjusted p-values for the ER 45min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization)

6.2 ER 90min vs ER 0min, excluding peptides with missing intensities, quantile normalization

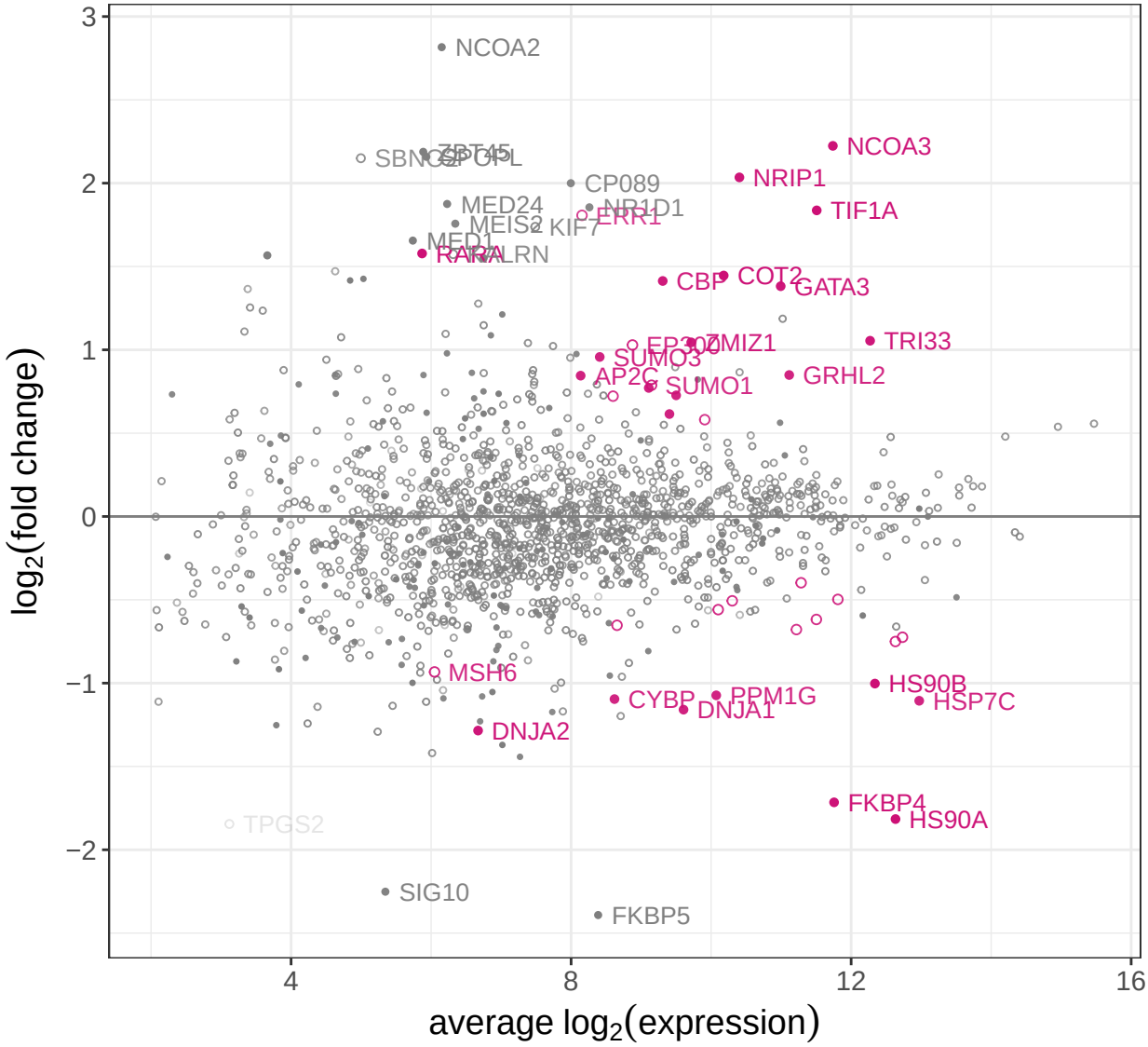

Figure 8: MA plot of the average intensity against $\log_2$ fold change for the ER 90min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization). Top ranking differentially-expressed proteins with false discovery rate below 0.05 are highlighted in pink. Open circles indicate that the protein is non-specific from the IgG control comparison.

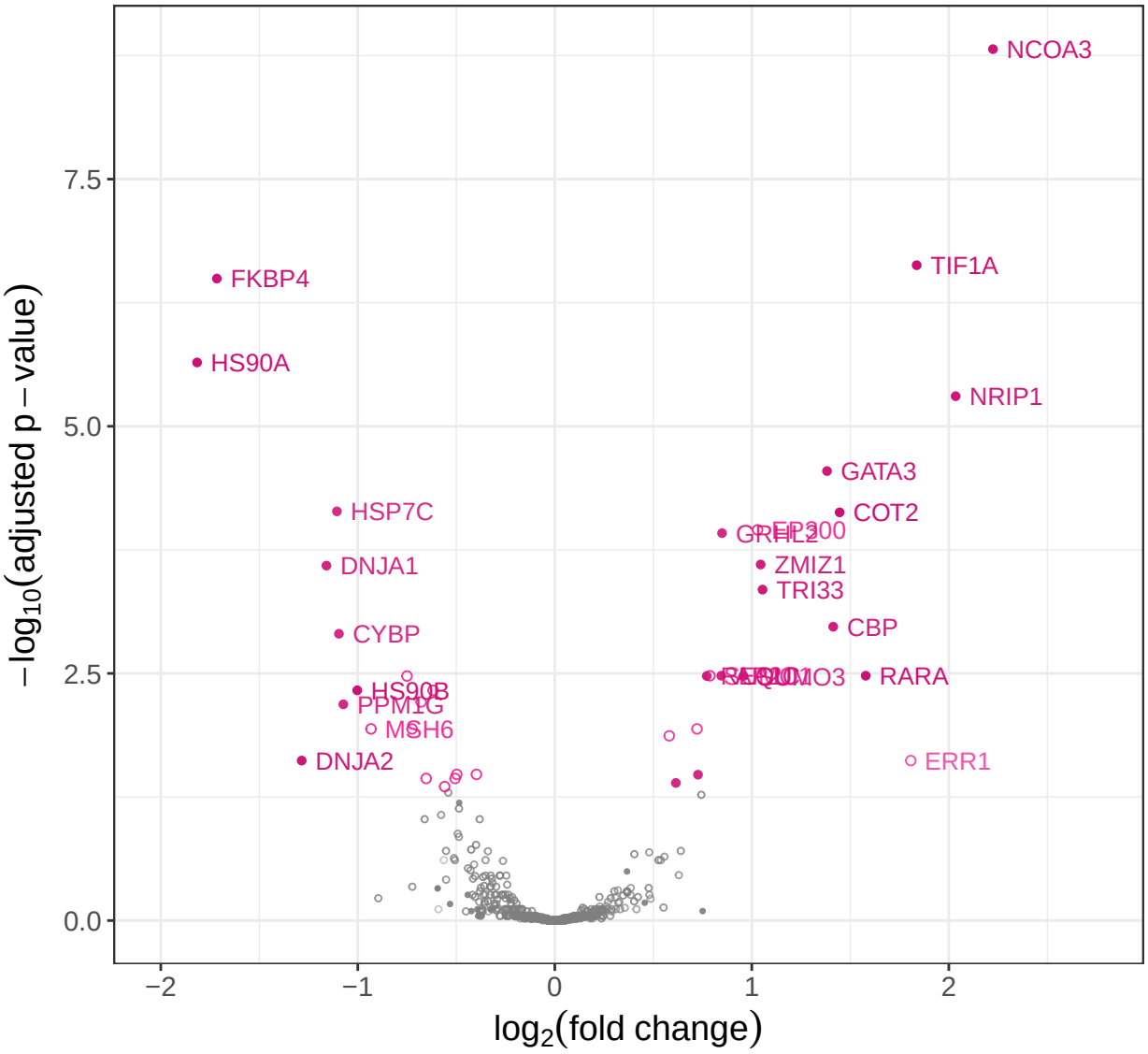

Figure 9: Volcano plot of the average intensity against $\log_2$ fold change for the ER 90min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization). Top ranking differentially-expressed proteins with false discovery rate below 0.05 are highlighted in pink. Open circles indicate that the protein is non-specific from the IgG control comparison.

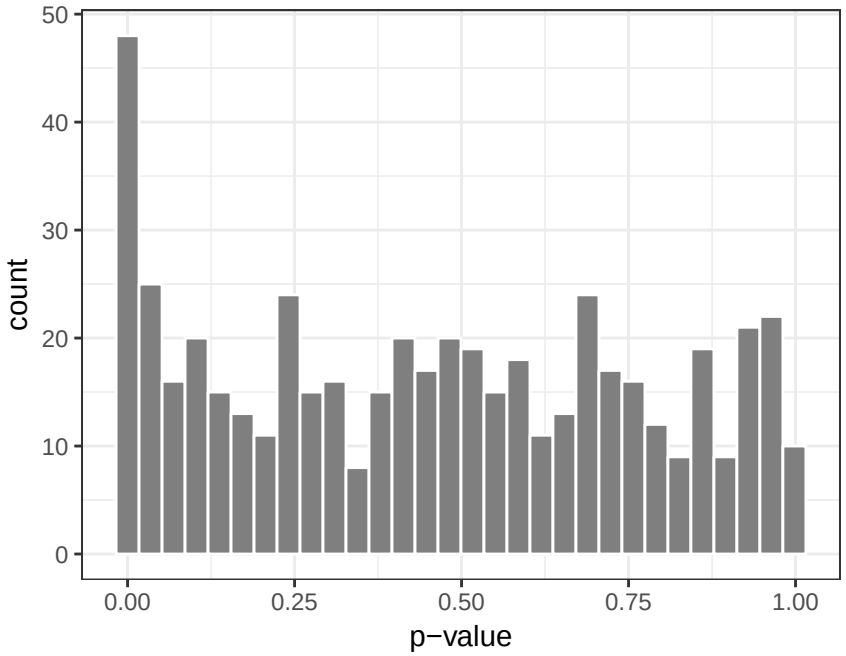

Figure 10: Histogram of p-values for the ER 90min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization)

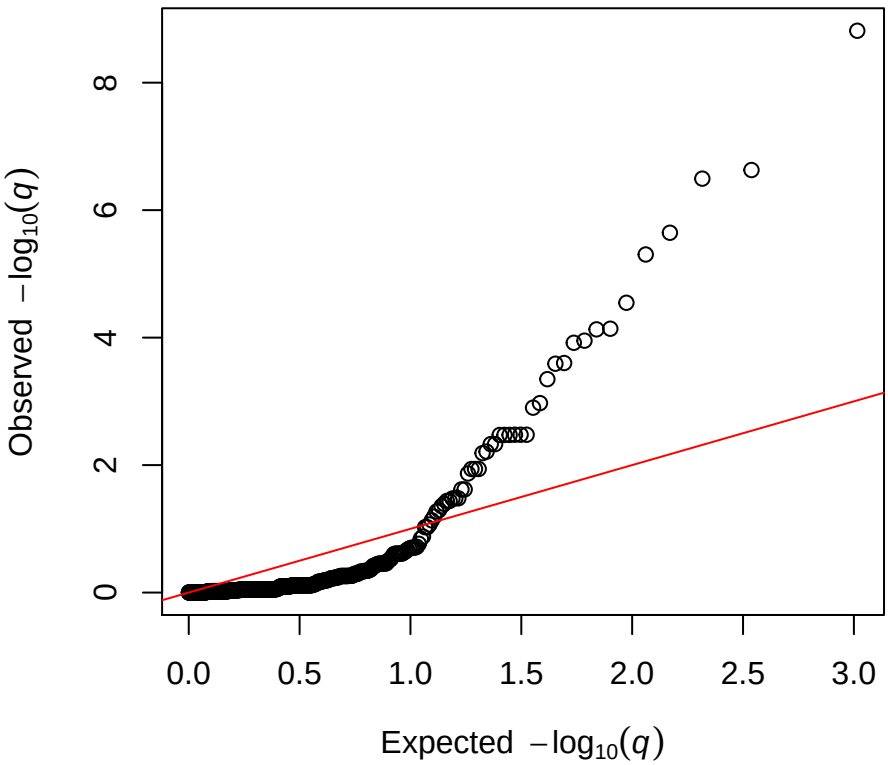

Figure 11: QQ plot of the adjusted p-values for the ER 90min vs ER 0min comparison (excluding peptides with missing intensities, quantile normalization)

6.3 FOXA1 45min vs FOXA1 0min, excluding peptides with missing intensities, quantile normalization

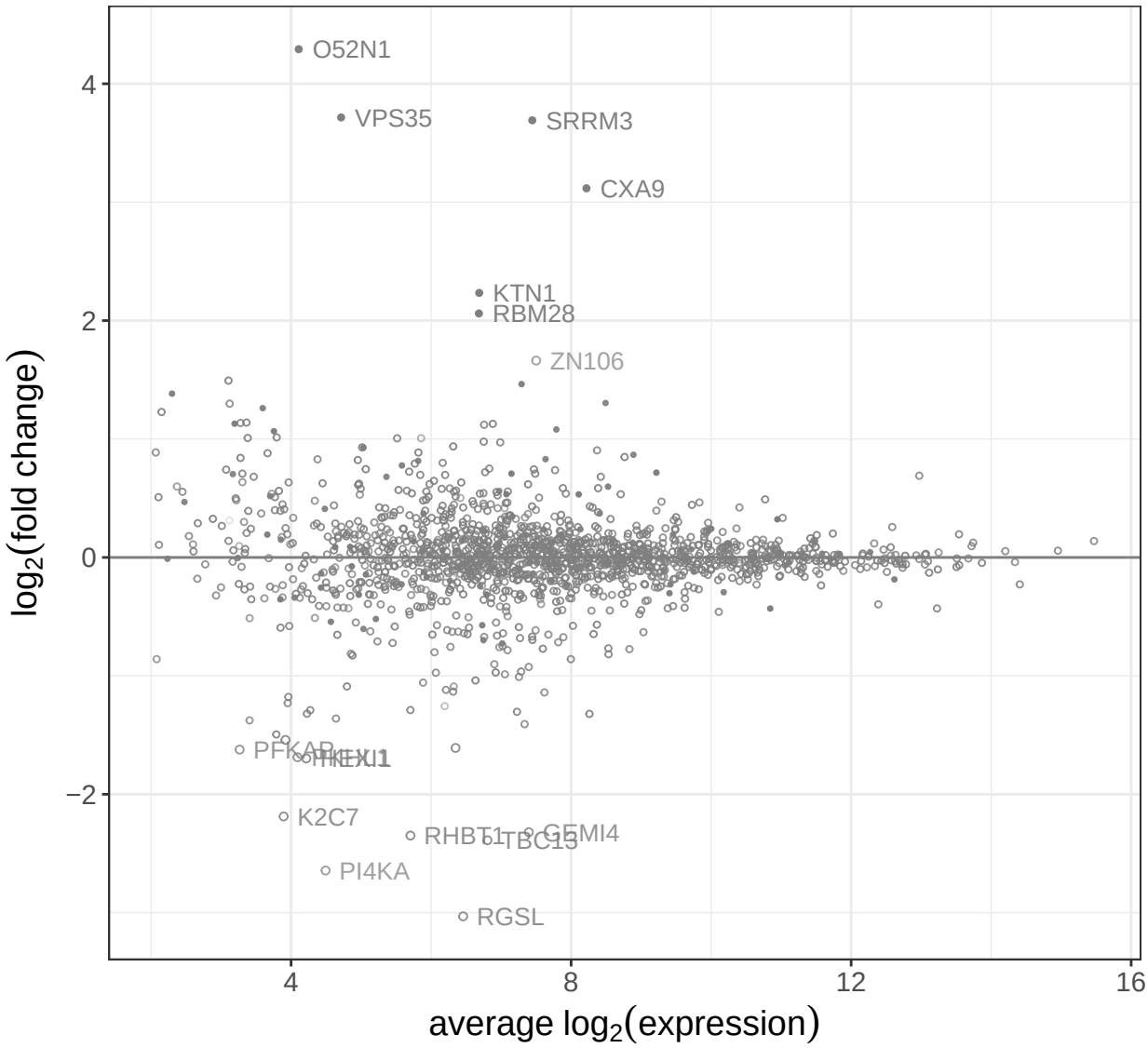

Figure 12: MA plot of the average intensity against $\log_2$ fold change for the FOXA1 45min vs FOXA1 0min comparison (excluding peptides with missing intensities, quantile normalization). Top ranking differentially-expressed proteins with false discovery rate below 0.05 are highlighted in pink. Open circles indicate that the protein is non-specific from the IgG control comparison.

6.4 FOXA1 90min vs FOXA1 0min, excluding peptides with missing intensities, quantile normalization

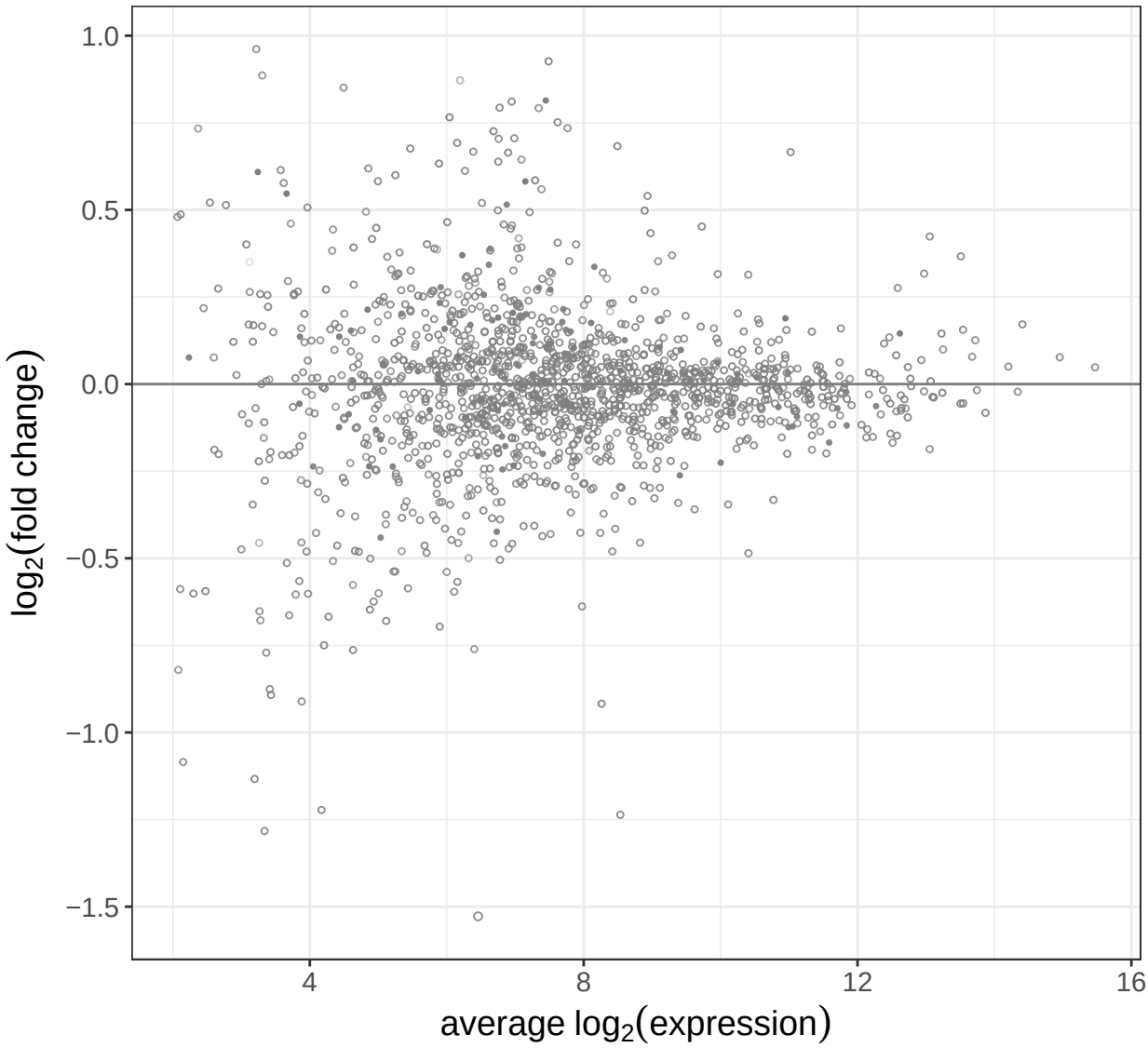

Figure 13: MA plot of the average intensity against $\log_2$ fold change for the FOXA1 90min vs FOXA1 0min comparison (excluding peptides with missing intensities, quantile normalization). Top ranking differentially-expressed proteins with false discovery rate below 0.05 are highlighted in pink. Open circles indicate that the protein is non-specific from the IgG control comparison.

7 Differential binding results tables

The following tables contain the top ranking differentially bound proteins for each comparison. Included are all proteins that reach a statistical signficance of 0.05 in terms of the adjusted p-value and those with an absolute $\log_2$ fold change of 1 or above.

The IgG column gives the larger of the $\log_2$ fold changes for the two groups against the IgG control and an asterisk indicates specific binding where this $\log_2$ fold change is above a threshold of 1. N is the number of replicates in which the protein was observed.

In all cases, peptide intensities were quantile normalized and measurements with missing values were removed prior to summarization at the protein level.

7.1 ER 45min vs ER 0min

Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
Q15596	NCOA2	1	2.96	6.15			2.12	*
Q13451	FKBP5	2	-2.51	8.39			2.55	*
Q9Y6Q9	NCOA3	3	2.28	11.74	1e-09	18.68	1.90	*
Q96K62	ZBT45	1	2.14	5.89			2.58	*
Q96LC7	SIG10	1	-2.08	5.35			1.79	*
Q6IQ16	SPOPL	1	1.96	5.93			1.59	*
P11474	ERR1	3	1.94	8.16	0.015	-0.99	-0.14	
P48552	NRIP1	3	1.91	10.40	1.2e-05	7.81	1.56	*
O15164	TIF1A	3	1.85	11.51	2.1e-07	12.83	2.15	*
Q9Y2G9	SBNO2	1	1.83	5.00			0.09	
P07900	HS90A	3	-1.82	12.63	2.2e-06	9.77	2.23	*
O75448	MED24	1	1.76	6.23			1.66	*
Q02790	FKBP4	3	-1.73	11.76	2.8e-07	12.14	1.89	*
O14744	ANM5	1	-1.63	2.45			-0.44	
Q9P2D0	IBTK	1	-1.59	3.22			1.84	*
P10276	RARA	3	1.56	5.87	0.0034	0.75	2.75	*
Q15648	MED1	1	1.53	5.74			1.97	*
Q5D862	FILA2	1	-1.52	7.77			-0.29	
P32242	OTX1	2	1.50	5.03			1.88	*
Q2M1P5	KIF7	1	1.46	7.49			0.71	
P24468	COT2	3	1.44	10.18	7.6e-05	5.43	2.07	*
P34932	HSP74	1	-1.41	5.24			0.54	
O14770	MEIS2	1	1.40	6.35			1.08	*
P61960	UFM1	1	-1.39	6.88			1.92	*
Q8N2W9	PIAS4	2	1.39	7.02			1.68	*
Q86UV5	UBP48	1	-1.37	7.27			1.36	*
Q92793	CBP	3	1.35	9.31	0.0015	1.76	1.48	*
P23771	GATA3	3	1.34	10.99	4.5e-05	6.33	1.61	*
Q9P2D7	DYH1	1	-1.32	7.02			2.63	*
O60884	DNJA2	3	-1.30	6.67	0.023	-1.51	1.76	*
Q9UBW7	ZMYM2	1	1.25	6.75			1.46	*
Q01546	K22O	2	-1.25	7.38			-1.21	
O60809	PRA10	1	-1.22	7.88			-0.24	
O15117	FYB	1	1.19	3.38			-1.88	
P53990	IST1	1	-1.18	5.43			-4.76	
P31689	DNJA1	3	-1.18	9.61	0.00019	4.08	1.20	*
O00712	NFIB	1	1.17	6.67			-0.34	
Q8N283	ANR35	1	-1.17	8.71			-0.15	
Q9UL15	BAG5	1	-1.16	6.18			1.11	*
Q6PHW0	IYD1	1	1.16	6.85			1.52	*
Q9ULJ6	ZMIZ1	3	1.16	9.72	7.6e-05	5.39	1.61	*
P15408	FOSL2	1	1.15	3.66			1.69	*
Q9UNE7	CHIP	2	-1.14	7.73			1.05	*
Q9UPN9	TRI33	3	1.14	12.27	0.00019	4.24	1.73	*
P11142	HSP7C	3	-1.14	12.97	5e-05	6.05	1.00	*
Q9NWS6	F118A	1	-1.13	3.79			1.60	*
Q9HB71	CYBP	3	-1.12	8.62	0.0011	2.26	1.02	*
Q8TCU4	ALMS1	1	1.12	4.63			1.44	*
O14686	KMT2D	1	1.11	7.38			0.39	

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Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
Q7Z794	K2C1B	1	-1.11	7.34			-0.84	
Q6KC79	NIPBL	1	1.11	4.84			2.63	*
Q68E01	INT3	2	-1.10	3.90			-0.67	
Q8NFD5	ARI1B	1	1.08	7.74			0.56	
Q9Y6X2	PIAS3	2	1.07	6.75			0.71	
Q92624	APBP2	1	-1.07	6.01			0.05	
O15355	PPM1G	3	-1.07	10.07	0.0072	-0.20	1.09	*
Q8NH53	O52N1	1	1.06	4.11			1.28	*
Q13492	PICAL	1	1.06	3.60			0.12	
Q4L235	ACSF4	1	-1.05	4.38			-0.13	
O00170	AIP	2	-1.04	6.89			1.13	*
P14625	ENPL	2	1.04	4.85			-0.35	
O60244	MED14	1	1.04	6.62			1.56	*
Q15185	TEBP	1	-1.03	8.55			1.29	*
Q6P2C8	MED27	1	1.03	6.21			-0.01	
Q5VTD9	GFI1B	1	1.02	5.70			0.42	
O14929	HAT1	2	-1.01	5.12			0.70	
P08238	HS90B	3	-0.99	12.34	0.0049	0.22	2.04	*
P55854	SUMO3	3	0.98	8.41	0.003	0.96	1.13	*
Q09472	EP300	3	0.96	8.88	0.00019	4.12	0.80	
P0DMV9	HS71B	3	-0.84	12.63	0.0013	1.99	0.65	
Q6ISB3	GRHL2	3	0.83	11.12	0.00015	4.56	1.04	*
Q92754	AP2C	3	0.81	8.14	0.0046	0.38	1.15	*
Q92785	REQU	3	0.78	9.11	0.003	0.93	1.16	*
P52701	MSH6	3	-0.76	6.05	0.048	-2.50	0.97	
P63165	SUMO1	3	0.74	9.15	0.0048	0.30	0.72	
P12956	XRCC6	3	-0.74	12.73	0.01	-0.60	0.90	
P31948	STIP1	3	-0.66	11.50	0.003	0.94	0.59	
P78527	PRKDC	3	-0.63	11.22	0.011	-0.71	0.36	
Q9HAV4	XPO5	3	-0.63	8.66	0.048	-2.50	0.72	
O14497	ARI1A	3	0.61	8.60	0.04	-2.26	0.29	
Q9Y383	LC7L2	3	-0.55	10.30	0.023	-1.53	0.51	
Q13263	TIF1B	3	-0.55	13.51	0.033	-2.00	1.17	*
P09874	PARP1	3	-0.53	11.81	0.023	-1.59	0.63	
Q92925	SMRD2	3	0.51	9.91	0.037	-2.13	0.23	
P25685	DNJB1	3	-0.45	9.66	0.039	-2.22	0.60	
Q99873	ANM1	3	-0.42	11.29	0.024	-1.66	0.65	

Table 5: Top ranking differentially bound proteins from the ER 45min vs ER 0min comparison, sorted by log2 fold change.

7.2 ER 90min vs ER 0min

Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
Q15596	NCOA2	1	2.82	6.15			1.98	*
Q13451	FKBP5	2	-2.39	8.39			2.55	*
Q96LC7	SIG10	1	-2.25	5.35			1.79	*
Q9Y6Q9	NCOA3	3	2.22	11.74	1.5e-09	18.27	1.84	*
Q96K62	ZBT45	1	2.19	5.89			2.63	*
Q6IQ16	SPOPL	1	2.16	5.93			1.79	*
Q9Y2G9	SBNO2	1	2.15	5.00			0.41	
P48552	NRIP1	3	2.03	10.40	5e-06	8.74	1.68	*
Q6UX73	CP089	1	2.00	8.00			1.27	*
O75448	MED24	1	1.88	6.23			1.77	*
P20393	NR1D1	1	1.86	8.26			1.17	*
Q68CL5	TPGS2	2	-1.85	3.12			-6.76	
O15164	TIF1A	3	1.84	11.51	2.3e-07	12.70	2.14	*
P07900	HS90A	3	-1.82	12.63	2.3e-06	9.75	2.23	*
P11474	ERR1	3	1.81	8.16	0.024	-1.59	-0.28	
O14770	MEIS2	1	1.76	6.35			1.44	*
Q2M1P5	KIF7	1	1.74	7.49			0.99	
Q02790	FKBP4	3	-1.72	11.76	3.2e-07	11.99	1.89	*
Q15648	MED1	1	1.66	5.74			2.09	*
P10276	RARA	3	1.58	5.87	0.0033	0.87	2.77	*
O60229	KALRN	1	1.57	6.32			0.86	
P15408	FOSL2	1	1.57	3.66			2.11	*
Q9UBW7	ZMYM2	1	1.55	6.75			1.76	*
P81605	DCD	1	1.47	4.63			-1.79	
P24468	COT2	3	1.45	10.18	7.4e-05	5.53	2.08	*
Q86UV5	UBP48	1	-1.44	7.27			1.36	*
P32242	OTX1	2	1.43	5.03			1.81	*
Q92624	APBP2	1	-1.42	6.01			0.05	
Q6KC79	NIPBL	1	1.42	4.84			2.94	*
Q92793	CBP	3	1.41	9.31	0.0011	2.27	1.54	*
P23771	GATA3	3	1.38	10.99	2.8e-05	6.79	1.65	*
Q9P2D7	DYH1	1	-1.37	7.02			2.63	*
O15117	FYB	1	1.36	3.38			-1.71	
P34932	HSP74	1	-1.29	5.24			0.54	
O60884	DNJA2	3	-1.28	6.67	0.024	-1.61	1.76	*
O00712	NFIB	1	1.28	6.67			-0.24	
O76094	SRP72	1	1.25	3.41			0.35	
Q9NWS6	F118A	1	-1.25	3.79			1.60	*
O60934	NBN	1	-1.24	4.24			0.84	
Q13492	PICAL	1	1.24	3.60			0.30	
Q8WX92	NELFB	2	-1.23	6.70			1.26	*
Q8N2W9	PIAS4	2	1.21	7.02			1.50	*
Q8N283	ANR35	1	-1.20	8.71			-0.15	
Q6KB66	K2C80	2	1.19	11.02			0.73	
Q9UNE7	CHIP	2	-1.17	7.73			1.05	*
O60809	PRA10	1	-1.17	7.88			-0.24	
P31689	DNJA1	3	-1.16	9.61	0.00026	3.87	1.20	*
Q9Y6X2	PIAS3	2	1.15	6.75			0.79	
Q4L235	ACSF4	1	-1.14	4.38			-0.13	

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Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
Q15126	PMVK	1	-1.14	5.45			0.49	
Q9Y4C1	KDM3A	1	-1.11	5.93			0.91	
Q13158	FADD	1	-1.11	2.11			-0.90	
Q9ULL5	PRR12	1	1.11	3.33			-0.10	
P11142	HSP7C	3	-1.11	12.97	7.3e-05	5.69	1.00	*
Q9HB71	CYBP	3	-1.10	8.62	0.0013	2.04	1.02	*
Q6P2C8	MED27	1	1.10	6.21			0.06	
Q9UL15	BAG5	1	-1.09	6.18			1.11	*
Q6PHW0	IYD1	1	1.09	6.85			1.45	*
P07205	PGK2	1	-1.08	6.73			1.03	*
Q96QK1	VPS35	1	1.08	4.72			0.59	
O15355	PPM1G	3	-1.07	10.07	0.0065	-0.12	1.09	*
Q9UPN9	TRI33	3	1.05	12.27	0.00045	3.22	1.64	*
P61960	UFM1	1	-1.05	6.88			1.92	*
Q9ULJ6	ZMIZ1	3	1.04	9.72	0.00025	3.98	1.49	*
O43866	CD5L	2	-1.04	6.17			-2.51	
O14686	KMT2D	1	1.04	7.38			0.32	
Q5D862	FILA2	1	-1.03	7.77			-0.29	
Q09472	EP300	3	1.03	8.88	0.00011	5.00	0.86	
Q8NFD5	ARI1B	1	1.02	7.74			0.50	
P08238	HS90B	3	-1.00	12.34	0.0047	0.32	2.04	*
P55854	SUMO3	3	0.96	8.41	0.0034	0.71	1.11	*
P52701	MSH6	3	-0.93	6.05	0.012	-0.78	0.97	
Q6ISB3	GRHL2	3	0.85	11.12	0.00012	4.82	1.05	*
Q92754	AP2C	3	0.84	8.14	0.0033	0.88	1.19	*
P63165	SUMO1	3	0.79	9.15	0.0033	0.98	0.77	
Q92785	REQU	3	0.77	9.11	0.0034	0.81	1.15	*
P0DMV9	HS71B	3	-0.75	12.63	0.0034	0.76	0.65	
P61956	SUMO2	3	0.73	9.50	0.033	-2.05	1.10	*
P12956	XRCC6	3	-0.72	12.73	0.012	-0.75	0.90	
O14497	ARI1A	3	0.72	8.60	0.012	-0.81	0.41	
P78527	PRKDC	3	-0.68	11.22	0.0061	-0.03	0.36	
Q9HAV4	XPO5	3	-0.65	8.66	0.037	-2.19	0.72	
P31948	STIP1	3	-0.62	11.50	0.0047	0.29	0.59	
Q04724	TLE1	3	0.61	9.40	0.041	-2.32	1.12	*
Q92925	SMRD2	3	0.58	9.91	0.014	-1.00	0.31	
P55060	XPO2	3	-0.56	10.10	0.044	-2.43	0.86	
Q9Y383	LC7L2	3	-0.51	10.30	0.037	-2.18	0.51	
P09874	PARP1	3	-0.50	11.81	0.033	-2.01	0.63	
Q99873	ANM1	3	-0.40	11.29	0.033	-1.99	0.65	

Table 6: Top ranking differentially bound proteins from the ER 90min vs ER 0min comparison, sorted by log2 fold change.

7.3 ER 90min vs ER 45min

Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
Q13158	FADD	1	-1.34	2.11			-0.67	
Q68CL5	TPGS2	2	-1.21	3.12			-7.40	
Q6UX73	CP089	1	1.20	8.00			1.27	*
P33176	KINH	1	1.09	4.64			0.78	
O14744	ANM5	1	1.06	2.45			-1.01	
Q8WXG9	GPR98	1	1.02	6.85			2.30	*

Table 7: Top ranking differentially bound proteins from the ER 90min vs ER 45min comparison, sorted by log2 fold change.

7.4 FOXA1 45min vs FOXA1 0min

Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
Q8NH53	O52N1	1	4.29	4.11			4.90	*
Q96QK1	VPS35	1	3.72	4.72			4.08	*
A6NNA2	SRRM3	1	3.69	7.45			4.27	*
P57773	CXA9	1	3.12	8.22			2.52	*
A5PLK6	RGSL	1	-3.03	6.46			0.16	
P42356	PI4KA	1	-2.64	4.49			-1.42	
Q9NVG8	TBC13	1	-2.39	6.80			0.41	
O94844	RHBT1	1	-2.35	5.71			0.20	
P57678	GEMI4	1	-2.32	7.40			-0.16	
Q86UP2	KTN1	1	2.23	6.69			2.02	*
P08729	K2C7	1	-2.19	3.89			0.04	
Q9NW13	RBM28	1	2.06	6.68			2.13	*
O94992	HEXI1	2	-1.70	4.22			0.53	
Q86WI1	PKHL1	1	-1.69	4.09			-0.70	
Q9H2Y7	ZN106	1	1.66	7.50			-1.73	
Q01813	PFKAP	1	-1.62	3.27			-0.69	
Q8IV04	TB10C	1	-1.61	6.35			0.15	
Q9H3P2	NELFA	1	-1.54	3.92			0.55	
Q9NWS6	F118A	1	-1.49	3.79			0.73	
Q9Y3E5	PTH2	1	1.49	3.11			0.89	
Q8TDN6	BRX1	1	1.46	7.29			1.55	*
Q8NF37	PCAT1	1	-1.41	7.34			-0.42	
Q9H0A0	NAT10	1	1.38	2.30			1.61	*
Q96KQ4	ASPP1	1	-1.38	3.41			-0.79	
P33176	KINH	1	-1.36	4.64			-0.26	
P20393	NR1D1	1	-1.32	8.26			0.77	
O60610	DIAP1	1	-1.32	4.23			0.08	
Q9BQG0	MBB1A	1	1.30	8.49			1.14	*
Q9HA92	RSAD1	1	-1.30	7.23			0.48	
Q9UHB6	LIMA1	1	1.30	3.12			-0.08	
Q9BXD5	NPL	1	-1.29	4.27			0.16	
Q5VTD9	GFI1B	1	-1.29	5.70			0.24	
Q13492	PICAL	1	1.26	3.60			1.43	*
Q15413	RYR3	1	-1.26	6.19			-5.07	
Q96HY6	DDRGK	1	-1.23	3.95			-0.17	
O00487	PSDE	1	1.23	2.15			0.67	
O15269	SPTC1	1	-1.18	3.96			0.19	
Q9HDC9	APMAP	1	-1.14	7.62			-0.44	
O75179	ANR17	1	1.14	3.36			0.61	
Q8ND56	LS14A	1	1.14	3.28			0.07	
O60229	KALRN	1	-1.13	6.32			0.23	
O95433	AHSA1	1	1.13	3.19			1.67	*
Q5T0W9	FA83B	1	1.13	6.88			0.78	
P00450	CERU	1	1.12	6.76			0.04	
Q96CT7	CC124	1	-1.12	6.21			-0.32	
Q14677	EPN4	1	-1.09	6.32			-1.86	
Q08J23	NSUN2	2	-1.09	4.80			0.50	
Q14966	ZN638	1	1.08	7.79			1.09	*
Q9H9B1	EHMT1	1	1.07	3.76			1.84	*

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Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG
A5YKK6	CNOT1	1	-1.06	5.89			-0.60
Q9HCH5	SYTL2	1	-1.04	6.63			0.77
P61966	AP1S1	1	1.01	3.79			0.46
Q06787	FMR1	1	-1.01	7.26			-0.15
O15117	FYB	1	1.01	3.38			0.64
P29083	T2EA	1	1.01	5.86			-3.44
Q8IVT2	MISP	1	1.01	5.52			0.40

Table 8: Top ranking differentially bound proteins from the FOXA1 45min vs FOXA1 0min comparison, sorted by log2 fold change.

7.5 FOXA1 90min vs FOXA1 0min

Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG
A5PLK6	RGSL	1	-1.53	6.46			0.16
Q5T0F9	C2D1B	1	-1.28	3.34			0.00
P04433	KV309	1	-1.24	8.54			0.36
P55036	PSMD4	1	-1.22	4.17			0.15
O95433	AHSA1	1	-1.13	3.19			0.54
O00487	PSDE	1	-1.08	2.15			-0.56

Table 9: Top ranking differentially bound proteins from the FOXA1 90min vs FOXA1 0min comparison, sorted by log2 fold change.

7.6 FOXA1 90min vs FOXA1 45min

Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
Q8NH53	O52N1	1	-4.27	4.11			4.90	*
Q96QK1	VPS35	1	-4.20	4.72			4.08	*
P42356	PI4KA	1	3.49	4.49			-0.57	
P57773	CXA9	1	-2.97	8.22			2.52	*
A6NNA2	SRRM3	1	-2.88	7.45			4.27	*
Q86UP2	KTN1	1	-2.69	6.69			2.02	*
Q9NVG8	TBC13	1	2.67	6.80			0.69	
O94844	RHBT1	1	2.51	5.71			0.36	
O00487	PSDE	1	-2.31	2.15			0.67	
O95433	AHSA1	1	-2.26	3.19			1.67	*
Q15413	RYR3	1	2.13	6.19			-4.20	
P08729	K2C7	1	2.04	3.89			-0.11	
Q9H0A0	NAT10	1	-1.98	2.30			1.61	*
O75179	ANR17	1	-1.91	3.36			0.61	
Q9HDC9	APMAP	1	1.89	7.62			0.31	
P57678	GEMI4	1	1.88	7.40			-0.60	
Q8ND56	LS14A	1	-1.81	3.28			0.07	
Q9H3P2	NELFA	1	1.74	3.92			0.76	
O94992	HEXI1	2	1.69	4.22			0.51	
Q8IV04	TB10C	1	1.67	6.35			0.20	
P33176	KINH	1	1.65	4.64			0.03	
P61966	AP1S1	1	-1.62	3.79			0.46	
Q9NWS6	F118A	1	1.51	3.79			0.75	
A5PLK6	RGSL	1	1.50	6.46			-1.37	
Q13492	PICAL	1	-1.46	3.60			1.43	*
Q8TE85	GRHL3	1	1.43	4.85			-0.03	
Q9HCH5	SYTL2	1	1.43	6.63			1.16	*
Q9H2Y7	ZN106	1	-1.40	7.50			-1.73	
Q9Y6E0	STK24	1	-1.39	3.66			0.52	
Q14677	EPN4	1	1.37	6.32			-1.58	
P23677	IP3KA	1	1.35	7.05			-0.42	
Q9NW13	RBM28	1	-1.33	6.68			2.13	*
Q9Y3E5	PTH2	1	-1.32	3.11			0.89	
Q5T0F9	C2D1B	1	-1.32	3.34			0.04	
Q9HA92	RSAD1	1	1.31	7.23			0.49	
P04004	VTNC	1	1.29	6.39			-0.30	
O60229	KALRN	1	1.29	6.32			0.38	
Q8NF37	PCAT1	1	1.28	7.34			-0.55	
Q86WI1	PKHL1	1	1.26	4.09			-1.13	
Q5T1M5	FKB15	1	-1.25	6.17			-0.05	
Q8IUE6	H2A2B	2	1.23	7.40			0.00	
Q9H0S4	DDX47	1	1.18	7.09			-0.14	
Q96KQ4	ASPP1	1	1.16	3.41			-1.01	
Q8IVT2	MISP	1	-1.15	5.52			0.40	
Q9H9B1	EHMT1	1	-1.13	3.76			1.84	*
Q13158	FADD	1	-1.10	2.11			0.37	
P07384	CAN1	1	-1.09	5.85			0.49	
P32242	OTX1	2	-1.09	5.03			2.36	*
P02656	APOC3	3	1.08	6.97	1	-4.11	-0.76	

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Protein	Gene	N	log2FC	Avg Expr	p-value	B	IgG	
P35580	MYH10	1	1.07	7.89			-0.23	
O00442	RTCA	1	-1.06	2.48			1.26	*
P39019	RS19	2	-1.06	8.37			-0.10	
P14770	GPIX	2	1.06	6.28			-0.01	
Q9UHB6	LIMA1	1	-1.03	3.12			-0.08	
O14745	NHRF1	1	-1.02	5.90			0.31	

Table 10: Top ranking differentially bound proteins from the FOXA1 90min vs FOXA1 45min comparison, sorted by log2 fold change.