

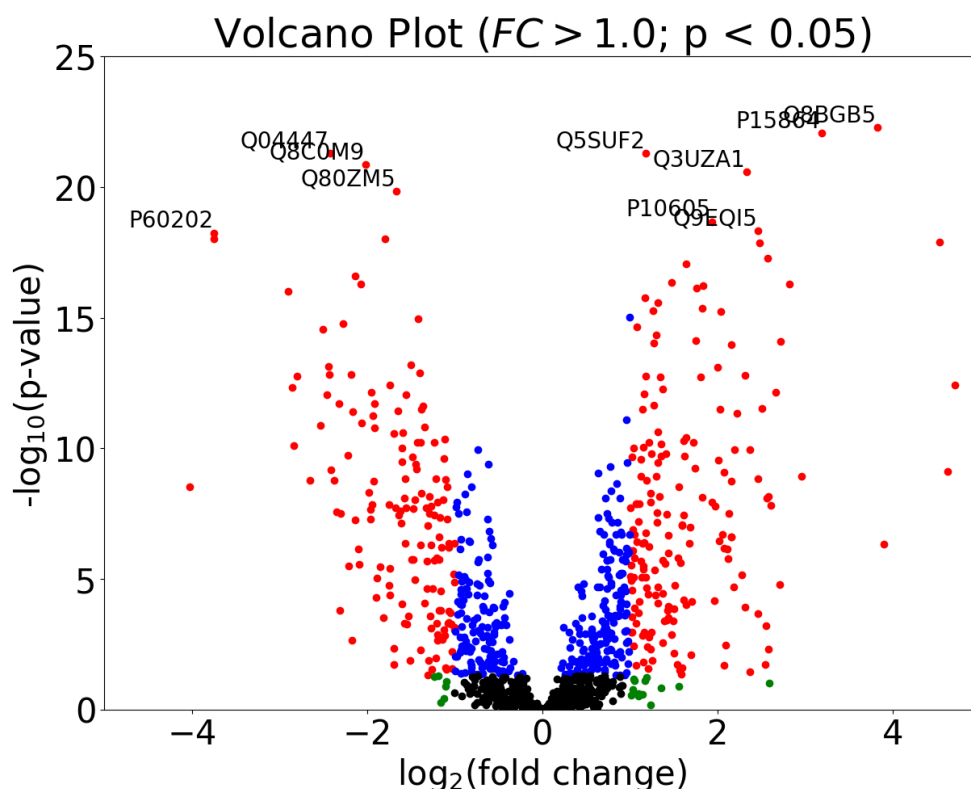
IsoQuaC report: gyuhijok

1 Differential Expression Analysis

Reference condition: **cerebellum**

1.1 Minimal expression

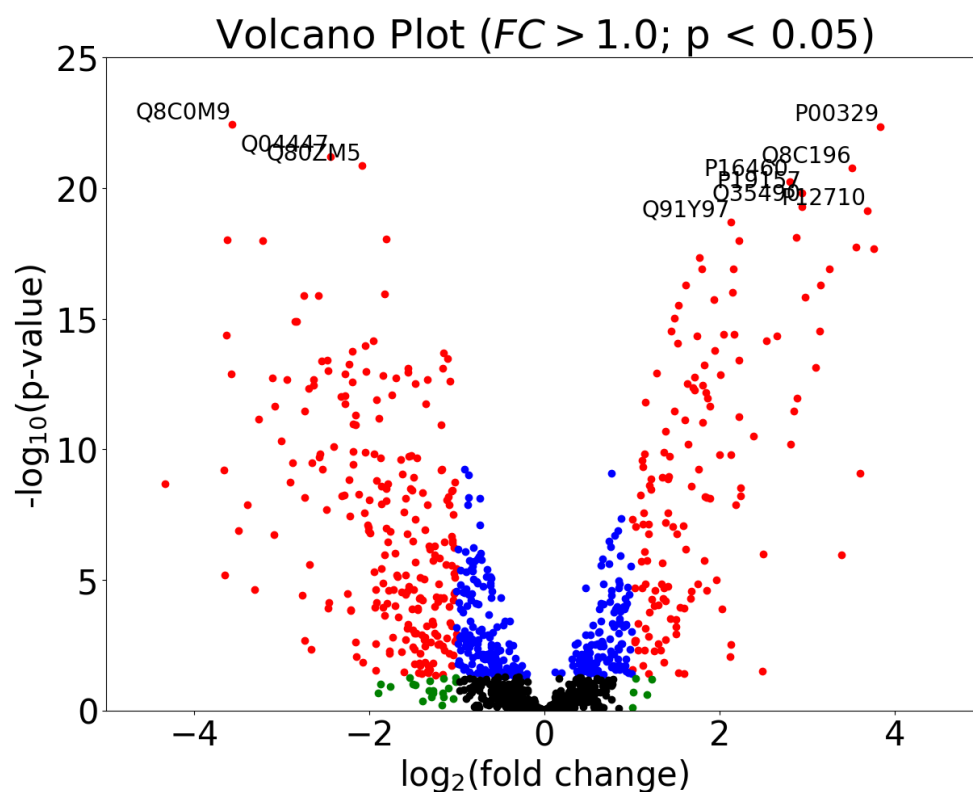
spleen:



protein	description	log2 fold change (spleen)	adjusted p-value (spleen)	#peptides (spleen)	#peptides (cerebellum)
Q8BGB5	LIM domain-containing protein 2 OS=Mus musculus GN=Limd2 PE=2 SV=1	3.825654	5.080076e-23	6	6
P15864	Histone H1.2 OS=Mus musculus GN=Hist1h1c PE=1 SV=2	3.186709	8.621444e-23	12	12
Q5SUF2	Luc7-like protein 3 OS=Mus musculus GN=Luc7l3 PE=1 SV=1	1.184682	4.997265e-22	4	4
Q04447	Creatine kinase B-type OS=Mus musculus GN=Ckb PE=1 SV=1	-2.422198	4.997265e-22	47	47

protein	description	log2 fold change (spleen)	adjusted p- value (spleen)	#peptides (spleen)	#peptides (cerebellum)
Q8C0M9	Isoaspartyl peptidase/L- asparaginase OS=Mus musculus GN=Asrgl1 PE=1 SV=1	-2.017541	1.363474e-21	4	4
Q3UZA1	CapZ-interacting protein OS=Mus musculus GN=Rcsd1 PE=1 SV=1	2.333813	2.654435e-21	4	4
Q80ZM5	H1 histone family, member X OS=Mus musculus GN=H1fx PE=1 SV=1	-1.663518	1.451035e-20	4	4
P10605	Cathepsin B OS=Mus musculus GN=Ctsb PE=1 SV=2	1.939880	2.133500e-19	8	8
Q9EQI5	Chemokine (C-X-C motif) ligand 7, isoform CRA_b OS=Mus musculus GN=Ppbp PE=1 SV=1	2.466752	4.720466e-19	4	4
P60202	Myelin proteolipid protein OS=Mus musculus GN=Plp1 PE=1 SV=2	-3.745521	5.855025e-19	23	24

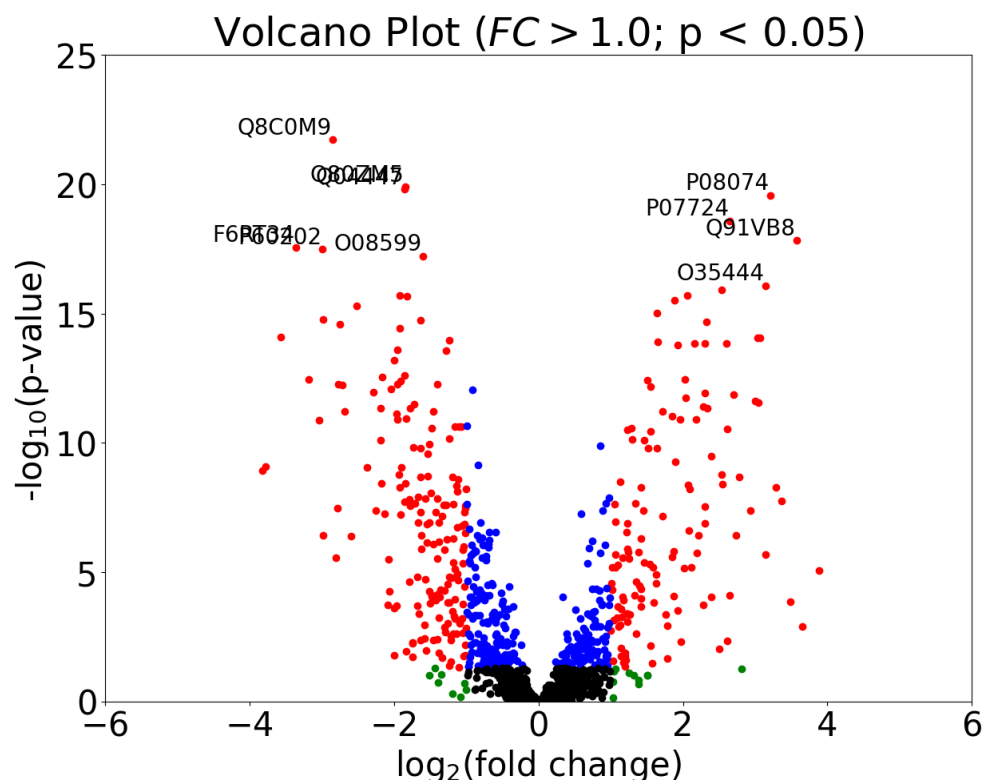
liver:



protein	description	log2 fold change (liver)	adjusted p- value (liver)	#peptides (liver)	#peptides (cerebellum)
Q8C0M9	Isoaspartyl peptidase/ L-asparaginase OS=Mus musculus GN=Asrgl1 PE=1 SV=1	-3.566053	3.755587e-23	4	4
P00329	Alcohol dehydrogenase 1 OS=Mus musculus GN=Adh1 PE=1 SV=2	3.839569	4.516988e-23	19	16
Q04447	Creatine kinase B- type OS=Mus musculus GN=Ckb PE=1 SV=1	-2.437593	6.264991e-22	45	47
Q80ZM5	H1 histone family, member X OS=Mus musculus GN=H1fx PE=1 SV=1	-2.079042	1.412145e-21	4	4
Q8C196	Carbamoyl-phosphate synthase [ammonia], mitochondrial OS=Mus musculus GN=Cps1 PE=1 SV=2	3.517864	1.710149e-21	163	153
P16460	Argininosuccinate synthase OS=Mus musculus GN=Ass1 PE=1 SV=1	2.801746	5.510558e-21	51	50

protein	description	log2 fold change (liver)	adjusted p-value (liver)	#peptides (liver)	#peptides (cerebellum)
P19157	Glutathione S-transferase P 1 OS=Mus musculus GN=Gstp1 PE=1 SV=2	2.944235	1.561682e-20	33	32
O35490	Betaine--homocysteine S-methyltransferase 1 OS=Mus musculus GN=Bhmt PE=1 SV=1	2.942485	5.144859e-20	42	42
P12710	Fatty acid-binding protein, liver OS=Mus musculus GN=Fabp1 PE=1 SV=2	3.686919	7.318910e-20	30	28
Q91Y97	Fructose-bisphosphate aldolase B OS=Mus musculus GN=Aldob PE=1 SV=3	2.130703	1.950984e-19	42	41

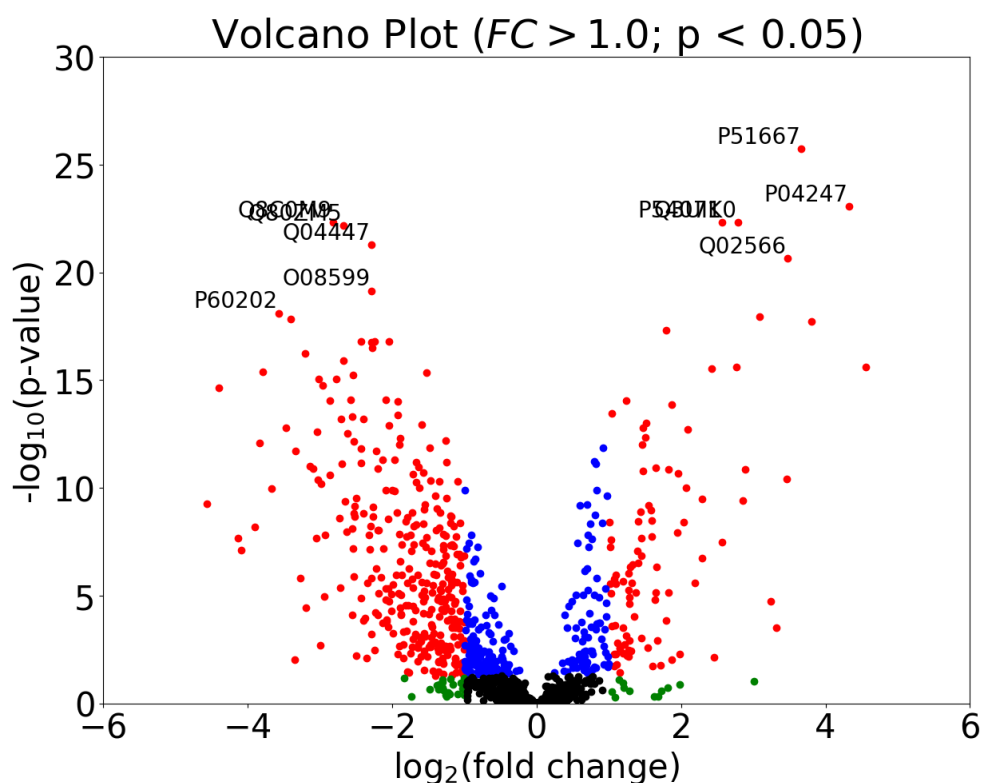
lung:



protein	description	log2 fold change (lung)	adjusted p-value (lung)	#peptides (lung)	#peptides (cerebellum)
Q8C0M9	Isoaspartyl peptidase/L-asparaginase OS=Mus musculus	-2.850986	1.913421e-22	4	4

protein	description	log2 fold change (lung)	adjusted p- value (lung)	#peptides (lung)	#peptides (cerebellum)
	GN=Asrgl1 PE=1 SV=1				
Q80ZM5	H1 histone family, member X OS=Mus musculus GN=H1fx PE=1 SV=1	-1.849040	1.216934e-20	4	4
Q04447	Creatine kinase B- type OS=Mus musculus GN=Ckb PE=1 SV=1	-1.851526	1.527503e-20	47	47
P08074	Carbonyl reductase [NADPH] 2 OS=Mus musculus GN=Cbr2 PE=1 SV=1	3.212120	2.651907e-20	34	31
P07724	Serum albumin OS=Mus musculus GN=Alb PE=1 SV=3	2.648467	2.572261e-19	156	152
Q91VB8	Alpha globin 1 OS=Mus musculus GN=Hba-a1 PE=1 SV=1	3.572051	1.442697e-18	44	34
F6RT34	Myelin basic protein (Fragment) OS=Mus musculus GN=Mbp PE=1 SV=1	-3.362024	2.790130e-18	25	25
P60202	Myelin proteolipid protein OS=Mus musculus GN=Plp1 PE=1 SV=2	-2.990962	3.250005e-18	24	24
O08599	Syntaxin-binding protein 1 OS=Mus musculus GN=Stxbp1 PE=1 SV=2	-1.603878	5.945820e-18	37	38
O35444	Advanced glycation end-products receptor OS=Mus musculus GN=Ager PE=1 SV=1	3.144604	8.224710e-17	8	8

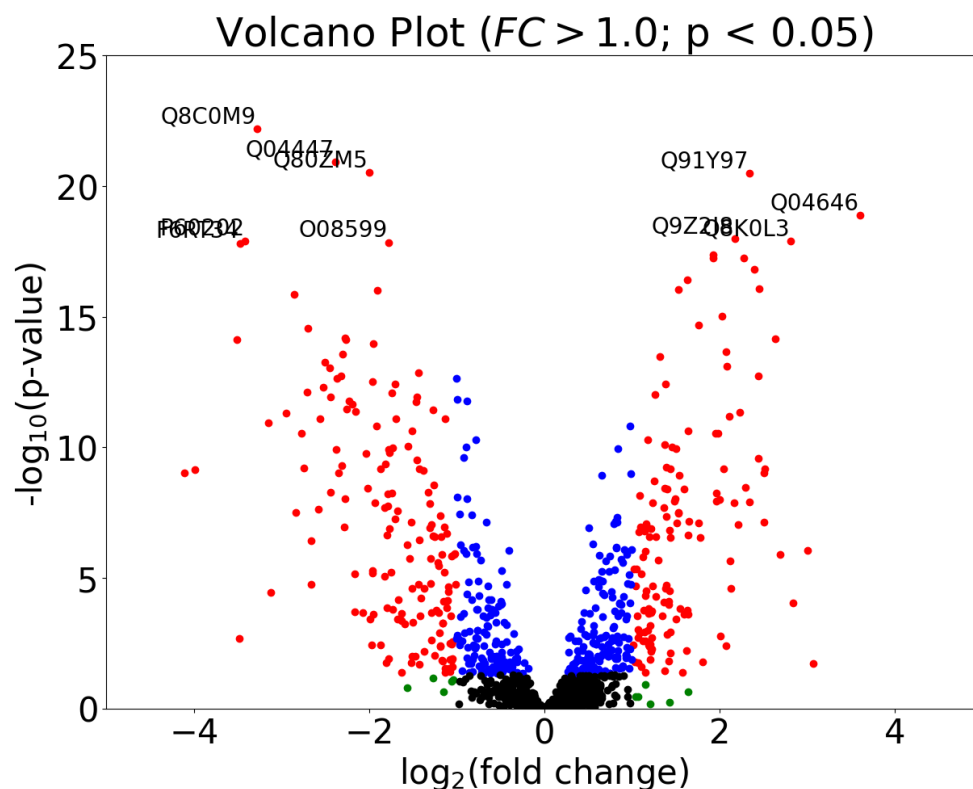
heart:



protein	description	log2 fold change (heart)	adjusted p-value (heart)	#peptides (heart)	#peptides (cerebellum)
P51667	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform OS=Mus musculus GN=Myl2 PE=1 SV=3	3.666005	1.877834e-26	30	30
P04247	Myoglobin OS=Mus musculus GN=Mb PE=1 SV=3	4.323525	8.802193e-24	24	24
P54071	Isocitrate dehydrogenase [NADP], mitochondrial OS=Mus musculus GN=Idh2 PE=1 SV=3	2.570406	4.790598e-23	38	37
Q3UIK0	Myosin-binding protein C, cardiac-type OS=Mus musculus GN=Mybpc3 PE=1 SV=1	2.789851	4.790598e-23	29	28
Q8C0M9	Isoaspartyl peptidase/L-asparaginase OS=Mus musculus	-2.814789	4.790598e-23	4	4

protein	description	log2 fold change (heart)	adjusted p-value (heart)	#peptides (heart)	#peptides (cerebellum)
	GN=Asrgl1 PE=1 SV=1				
Q80ZM5	H1 histone family, member X OS=Mus musculus GN=H1fx PE=1 SV=1	-2.680169	6.522514e-23	4	4
Q04447	Creatine kinase B-type OS=Mus musculus GN=Ckb PE=1 SV=1	-2.292699	5.114697e-22	44	47
Q02566	Myosin-6 OS=Mus musculus GN=Myh6 PE=1 SV=2	3.472587	2.234807e-21	121	117
O08599	Syntaxin-binding protein 1 OS=Mus musculus GN=Stxbp1 PE=1 SV=2	-2.284813	7.093556e-20	36	38
P60202	Myelin proteolipid protein OS=Mus musculus GN=Plp1 PE=1 SV=2	-3.575157	7.667929e-19	23	24

kidney:

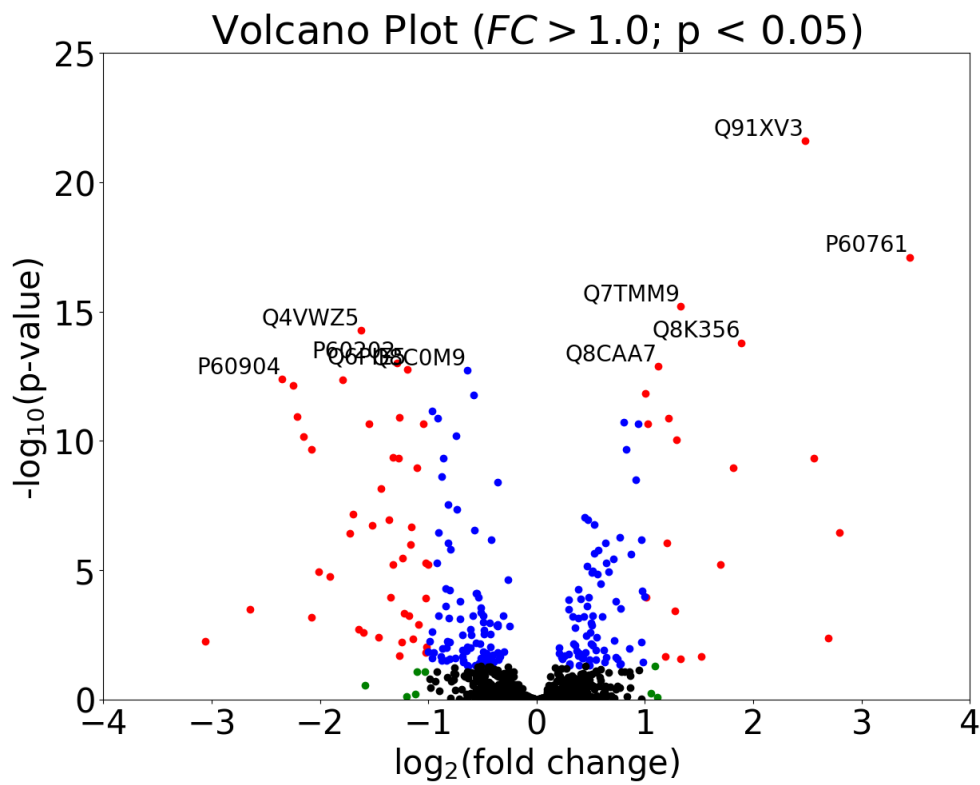


protein	description	log2 fold change (kidney)	adjusted p-value (kidney)	#peptides (kidney)	#peptides (cerebellum)
Q8C0M9		-3.276704	6.534318e-23	4	4

protein	description	log2 fold change (kidney)	adjusted p- value (kidney)	#peptides (kidney)	#peptides (cerebellum)
	Isoaspartyl peptidase/L- asparaginase OS=Mus musculus GN=Asrgl1 PE=1 SV=1				
Q04447	Creatine kinase B- type OS=Mus musculus GN=Ckb PE=1 SV=1	-2.388863	1.157880e-21	44	47
Q80ZM5	H1 histone family, member X OS=Mus musculus GN=H1fx PE=1 SV=1	-1.997149	3.061301e-21	4	4
Q91Y97	Fructose- biphosphate aldolase B OS=Mus musculus GN=Aldob PE=1 SV=3	2.347276	3.204293e-21	42	41
Q04646	Sodium/potassium- transporting ATPase subunit gamma OS=Mus musculus GN=Fxyd2 PE=2 SV=2	3.606236	1.283972e-19	3	3
Q9Z2I8	Succinyl-CoA ligase [GDP-forming] subunit beta, mitochondrial OS=Mus musculus GN=Suc1g2 PE=1 SV=3	2.173456	1.060740e-18	15	15
Q8K0L3	Acyl-coenzyme A synthetase ACSM2, mitochondrial OS=Mus musculus GN=Acsm2 PE=2 SV=1	2.817569	1.276341e-18	27	27
P60202	Myelin proteolipid protein OS=Mus musculus GN=Plp1 PE=1 SV=2	-3.412975	1.276341e-18	24	24
O08599	Syntaxin-binding protein 1 OS=Mus musculus GN=Stxbp1 PE=1 SV=2	-1.775069	1.479426e-18	37	38
F6RT34	Myelin basic protein (Fragment) OS=Mus	-3.474697	1.583607e-18	25	25

protein	description	log2 fold change (kidney)	adjusted p- value (kidney)	#peptides (kidney)	#peptides (cerebellum)
	musculus GN=Mbp PE=1 SV=1				

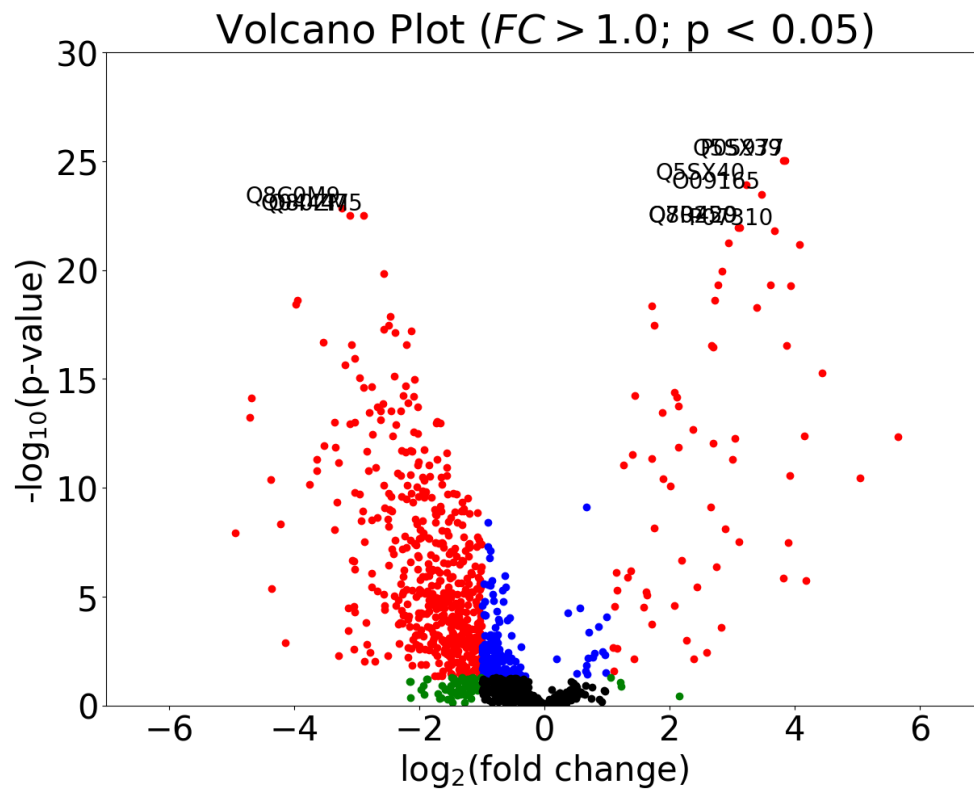
cerebrum:



protein	description	log2 fold change (cerebrum)	adjusted p- value (cerebrum)	#peptides (cerebrum)	#peptides (cerebellum)
Q91XV3	Brain acid soluble protein 1 OS=Mus musculus GN=Basp1 PE=1 SV=3	2.477558	2.449243e-22	34	34
P60761	Neurogranin OS=Mus musculus GN=Nrgn PE=1 SV=1	3.444557	8.037021e-18	3	3
Q7TMM9	Tubulin beta-2A chain OS=Mus musculus GN=Tubb2a PE=1 SV=1	1.331778	6.305670e-16	4	4
Q4VWZ5	Acyl-CoA-binding protein OS=Mus musculus GN=Dbi PE=1 SV=1	-1.623941	5.315633e-15	8	8

protein	description	log2 fold change (cerebrum)	adjusted p- value (cerebrum)	#peptides (cerebrum)	#peptides (cerebellum)
Q8K356	Lymphocyte antigen 6 complex, locus H OS=Mus musculus GN=Ly6h PE=1 SV=1	1.891703	1.604628e-14	6	6
P60202	Myelin proteolipid protein OS=Mus musculus GN=Plp1 PE=1 SV=2	-1.287361	9.888672e-14	24	24
Q8CAA7	Glucose 1,6- bisphosphate synthase OS=Mus musculus GN=Pgm2l1 PE=1 SV=1	1.122226	1.315814e-13	4	4
Q6PIE5	Sodium/ potassium- transporting ATPase subunit alpha-2 OS=Mus musculus GN=Atp1a2 PE=1 SV=1	-1.190665	1.768796e-13	25	25
Q8C0M9	Isoaspartyl peptidase/L- asparaginase OS=Mus musculus GN=Asrgl1 PE=1 SV=1	-0.636457	1.838637e-13	4	4
P60904	DnaJ homolog subfamily C member 5 OS=Mus musculus GN=Dnajc5 PE=1 SV=1	-2.352569	4.209468e-13	4	4

muscle:



protein	description	log2 fold change (muscle)	adjusted p-value (muscle)	#peptides (muscle)	#peptides (cerebellum)
Q5SX39	Myosin-4 OS=Mus musculus GN=Myh4 PE=2 SV=1	3.820635	9.307745e-26	104	89
P05977	Myosin light chain 1/3, skeletal muscle isoform OS=Mus musculus GN=Myl1 PE=3 SV=2	3.852623	9.307745e-26	38	30
Q5SX40	Myosin-1 OS=Mus musculus GN=Myh1 PE=2 SV=1	3.232335	1.217096e-24	15	15
O09165	Calsequestrin-1 OS=Mus musculus GN=Casq1 PE=1 SV=3	3.475466	3.316463e-24	22	21
Q8C0M9	Isoaspartyl peptidase/L-asparaginase OS=Mus musculus GN=Asrgl1 PE=1 SV=1	-3.236027	1.418380e-23	4	4
Q04447	Creatine kinase B-type OS=Mus musculus GN=Ckb PE=1 SV=1	-3.103213	3.146609e-23	41	47
Q80ZM5	H1 histone family, member X OS=Mus	-2.887091	3.146609e-23	4	4

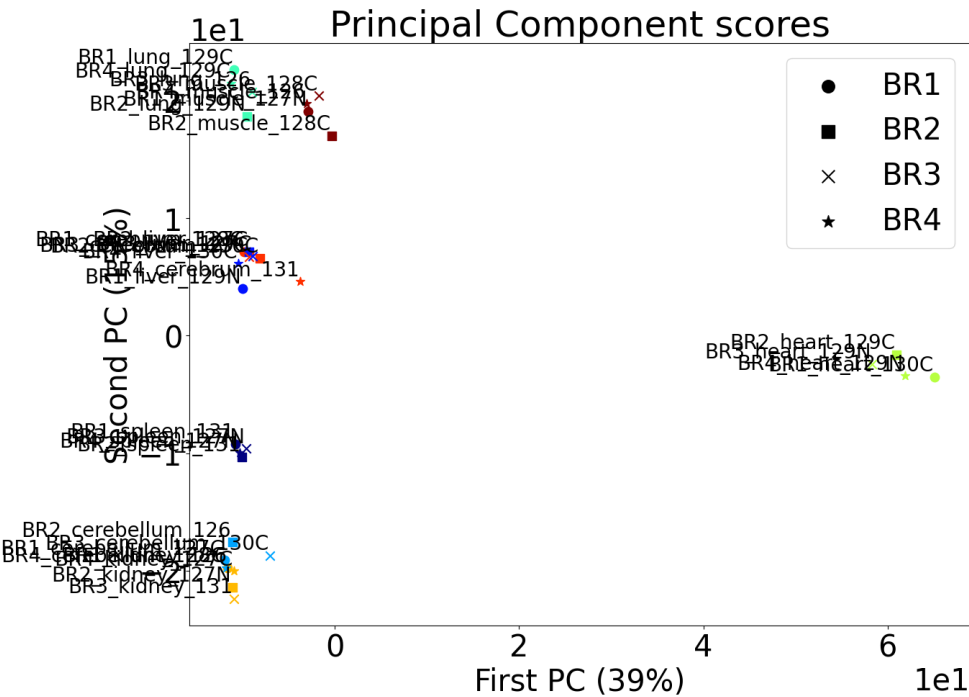
protein	description	log2 fold change (muscle)	adjusted p-value (muscle)	#peptides (muscle)	#peptides (cerebellum)
O70250	musculus GN=H1fx PE=1 SV=1 Phosphoglycerate mutase 2 OS=Mus musculus GN=Pgam2 PE=2 SV=3	3.096277	1.142737e-22	14	14
Q8R429	Sarcoplasmic/endoplasmic reticulum calcium ATPase 1 OS=Mus musculus GN=Atp2a1 PE=1 SV=1	3.118021	1.142737e-22	58	53
P07310	Creatine kinase M-type OS=Mus musculus GN=Ckm PE=2 SV=1	3.680435	1.549065e-22	77	62

2 Quality control

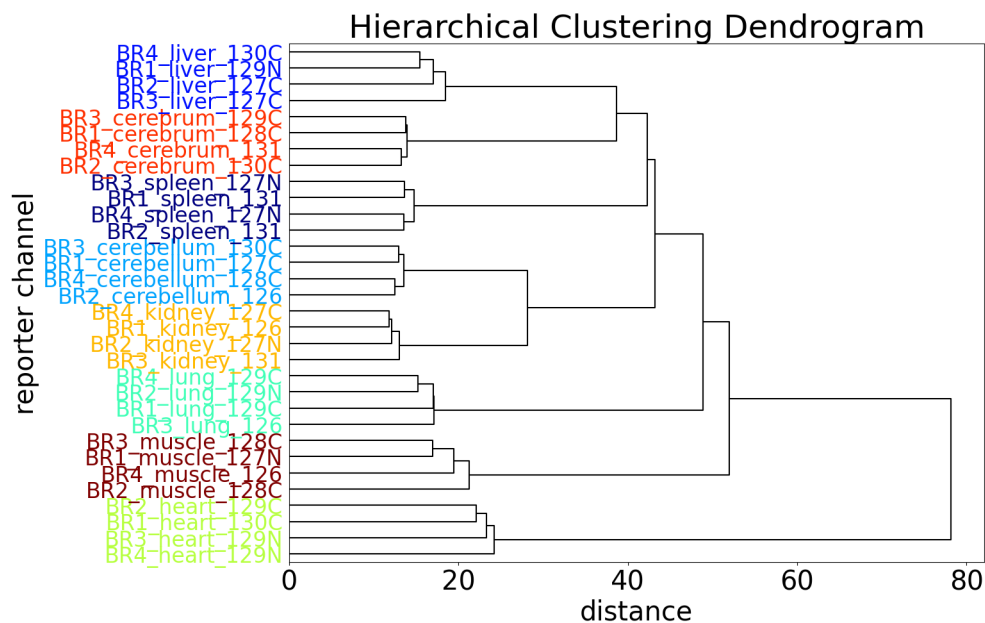
2.1 Experimental setup schema

MS run	spleen	liver	cerebellum	lung	heart
BR1	['BR1_spleen_131']	['BR1_liver_129N']	['BR1_cerebellum_127C']	['BR1_lung_129C']	['BR1_heart_129C']
BR2	['BR2_spleen_131']	['BR2_liver_127C']	['BR2_cerebellum_126']	['BR2_lung_129N']	['BR2_heart_129C']
BR3	['BR3_spleen_127N']	['BR3_liver_127C']	['BR3_cerebellum_130C']	['BR3_lung_126']	['BR3_heart_129C']
BR4	['BR4_spleen_127N']	['BR4_liver_130C']	['BR4_cerebellum_128C']	['BR4_lung_129C']	['BR4_heart_129C']

2.2 Principal components analysis plot



2.3 Hierarchical clustering dendrogram

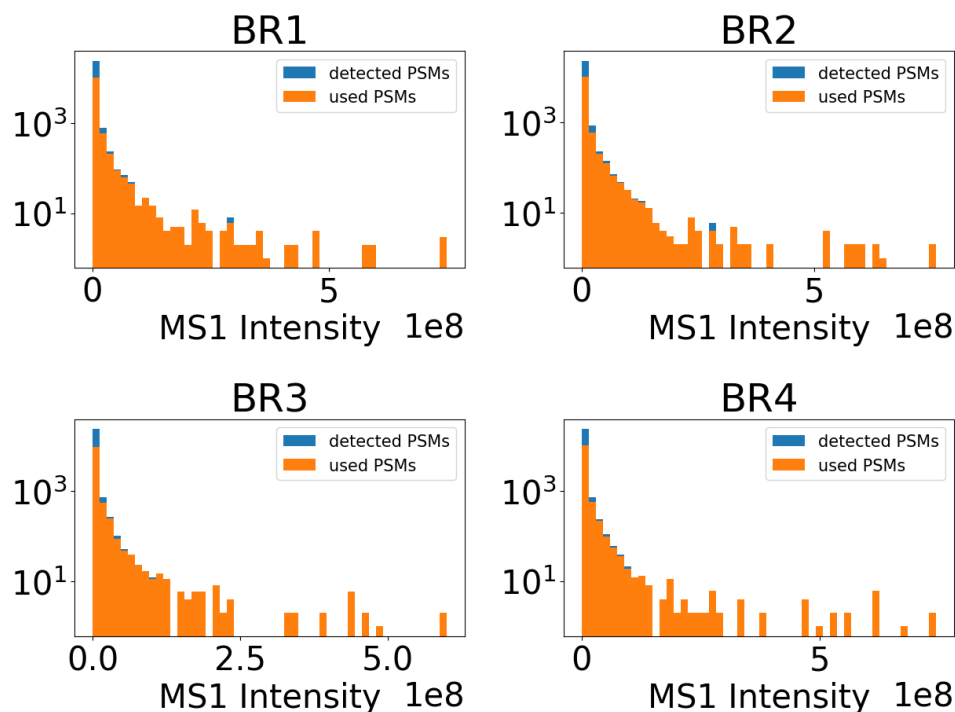


2.3 Miscellaneous

2.3.1 MS1 calibration plot

(No MS1 calibration information available)

2.3.2 MS1 Intensity histogram



2.3.3 Other QC info

peptides(*) means non-redundant, possibly modified peptides

- Total number of peptides(*) found = 6181
- Total number of unique (after protein grouping) peptides(*) found = 5599

- Number of peptides(*) found in all MS runs = 1532
- Number of peptides(*) not found in all MS runs = 4649
- Number of proteins in the minimal expression result = 1650
- Number of PSMs detected and effectively used (i.e. after cleaning and removing PSM Engine redundancy):

	detected	used
BR1	25963	11716
BR2	24284	11331
BR3	24939	10635
BR4	24329	10900

- Percentage of PSMs with too high Isolation interference (>30.0%):

BR1	BR2	BR3	BR4
54.661197	53.100166	57.161846	54.98286

- Injection time information:

	max	num	max	num	below
BR1	100.0	185.0			11531.0
BR2	100.0	94.0			11237.0
BR3	100.0	302.0			10333.0
BR4	100.0	192.0			10708.0

- DeltaM [ppm] statistics:

	max	mean	std
BR1	9.900713	0.900576	1.637692
BR2	9.919299	1.1485	1.678065
BR3	9.680797	2.463566	1.672358
BR4	9.777888	2.390644	1.636093

- MS2 intensity statistics:

- BR1

	max	mean	std
BR1_kidney_126	8523645.0	108327.368124	3.123990e+05
BR1_cerebellum_127C	5044792.0	102696.556462	3.272218e+05
BR1_muscle_127N	34315224.0	217824.341289	1.126449e+06
BR1_cerebrum_128C	5743696.0	119278.708517	3.197927e+05
BR1_lung_129C	68638160.0	175388.313280	1.424337e+06
BR1_liver_129N	17744182.0	81276.743813	2.894685e+05
BR1_heart_130C	26232164.0	145548.232690	6.163873e+05
BR1_spleen_131	39463472.0	188598.168059	1.253509e+06

- BR2

	max	mean	std
BR2_kidney_127N	4374192.0	102186.573075	2.441831e+05
BR2_cerebellum_126	16646492.0	114715.819656	3.775011e+05
BR2_muscle_128C	24628576.0	247752.457937	1.186632e+06
BR2_cerebrum_130C	7861325.5	117335.054419	3.198724e+05
BR2_lung_129N	70523280.0	189457.877878	1.922017e+06

	max	mean	std
BR2_liver_127C	8496806.0	131196.264753	3.595486e+05
BR2_heart_129C	12413190.0	134531.321154	4.973500e+05
BR2_spleen_131	34296504.0	185640.399399	1.124229e+06

◦ BR3

	max	mean	std
BR3_kidney_131	3631872.5	76575.194763	193845.460159
BR3_cerebellum_130C	5067829.5	83165.027254	257824.486182
BR3_muscle_128C	18727894.0	220369.894374	978445.411375
BR3_cerebrum_129C	5343449.5	95393.559694	244094.758112
BR3_lung_126	27204476.0	114205.039635	834583.690194
BR3_liver_127C	4984048.0	84538.121495	236628.904891
BR3_heart_129N	21974356.0	101582.854712	521985.361276
BR3_spleen_127N	21604796.0	130287.695646	827025.984827

◦ BR4

	max	mean	std
BR4_kidney_127C	5463268.5	96663.908401	2.475879e+05
BR4_cerebellum_128C	7447623.0	102480.092289	3.012029e+05
BR4_muscle_126	23946978.0	228209.044664	1.055901e+06
BR4_cerebrum_131	5015244.0	86508.476935	2.386424e+05
BR4_lung_129C	58561296.0	183451.159583	1.672431e+06
BR4_liver_130C	7866696.0	105818.785432	3.195800e+05
BR4_heart_129N	29374540.0	197011.880018	8.907514e+05
BR4_spleen_127N	35645208.0	144286.478237	9.368012e+05

3 Log

- IsoQuaC version = 0.10.2
- date = 2025-04-25 09:43:05
- job duration = 36s