

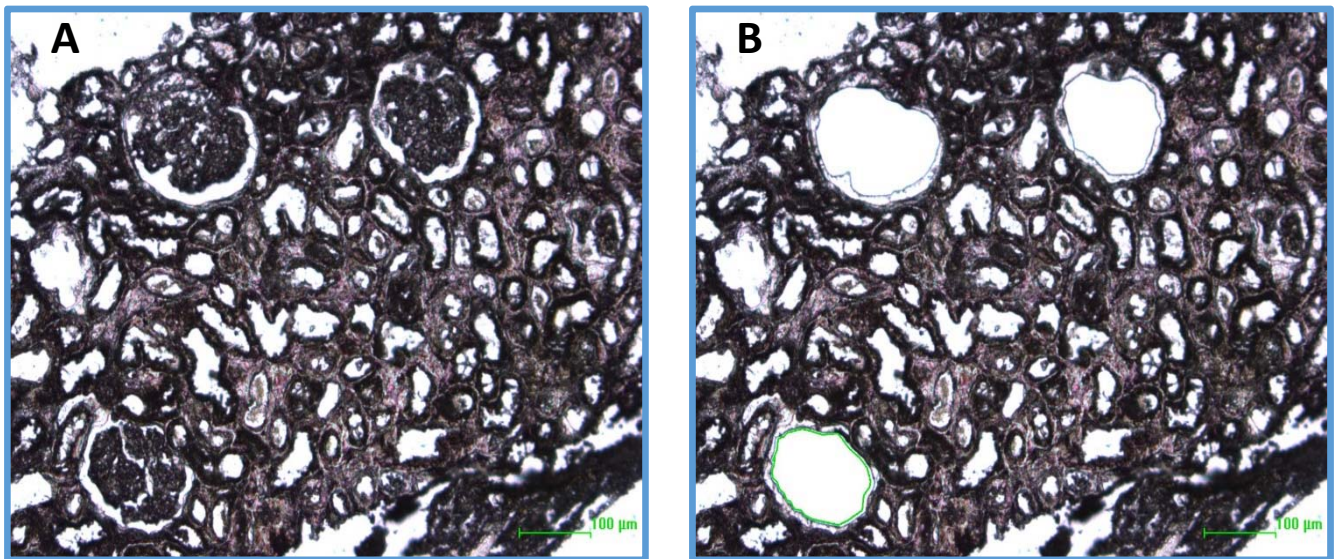
Table of Contents for Supplemental Material:

1. Supplemental Figure 1. Laser Capture of Glomeruli Excludes Bowman's Capsule.
Page 3.
2. Supplemental Figure 2. Comparison of ECM Protein Enrichment by Extraction Method.
Page 4.
3. Supplemental Figure 3. Immunohistochemistry of cFSGS, FSGS-NOS, and NC for Selected Glomerular ECM Proteins.
Page 5-10.
4. Supplemental Table 1. All Glomerular Proteins Identified from cFSGS, FSGS-NOS, and NC. (Mass Spectrometry data contained in a supplemental spreadsheet).
Pages 11-56.
5. Supplemental Table 2. Gene Names of Glomerular ECM Proteins Identified in NC, FSGS-NOS, and cFSGS
Pages 57-60.
6. Supplemental Table 3. Relative Abundance of Glomerular ECM Proteins.
Pages 61-68.
7. Supplemental Table 4. Glomerular Cathepsin and Annexin A3 Staining of Various Proteinuric Glomerular Diseases.
Page 69.
8. Supplemental Table 5. Comparison of Urinary Excretion of ECM Proteins.
Pages 70-73. (Mass Spectrometry data contained in a supplemental spreadsheet).
9. Supplemental Table 6. Peptides derived from ECM Proteins Showing Increased Urine Excretion. (Mass Spectrometry data contained in a supplemental spreadsheet).
Page 74.

10. Supplemental Table 7. Proteases Associated with Urine ECM Peptides.

Page 75.

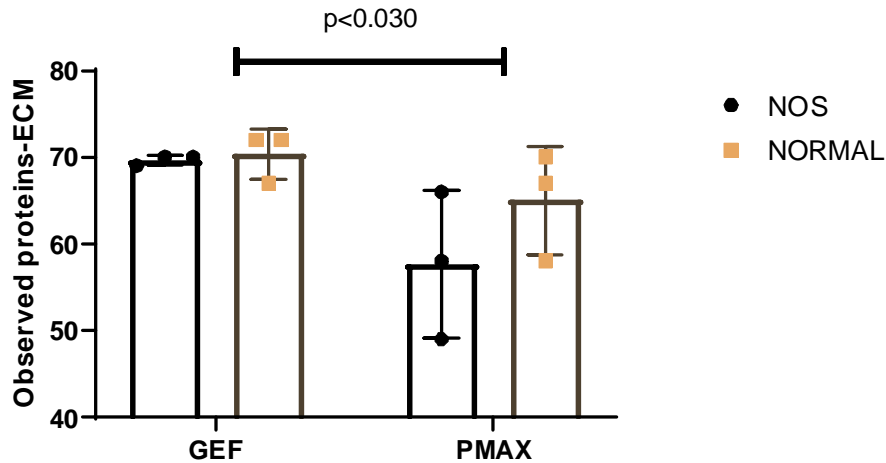
Supplemental Figure 1.



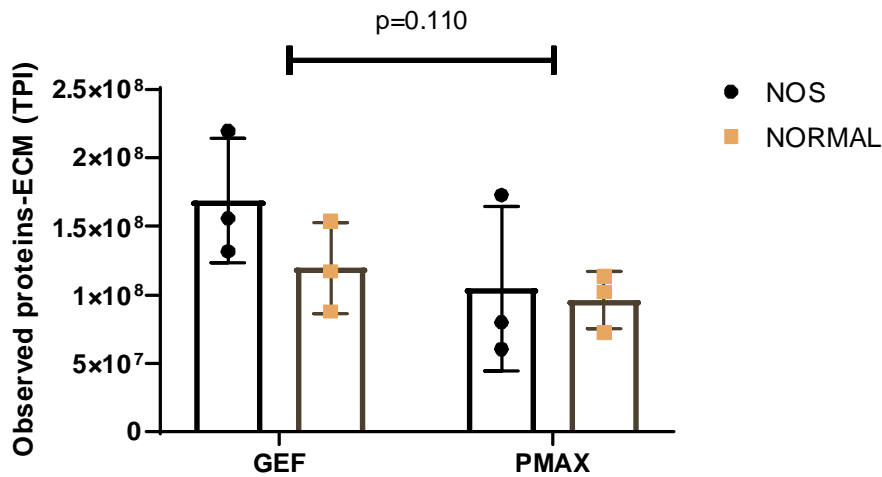
Images of glomeruli collected by laser capture microdissection (LCMD). Panel A, image taken from a region of the kidney biopsy prior to dissection of glomeruli by LCMD. Panel B, image taken from the same region as in panel A, demonstrating outlines of dissection for each glomerulus. Panel B also demonstrates that Bowman's capsule was not dissected with the captured glomeruli and is still intact/retained in the section.

Supplemental Figure 2.

A.

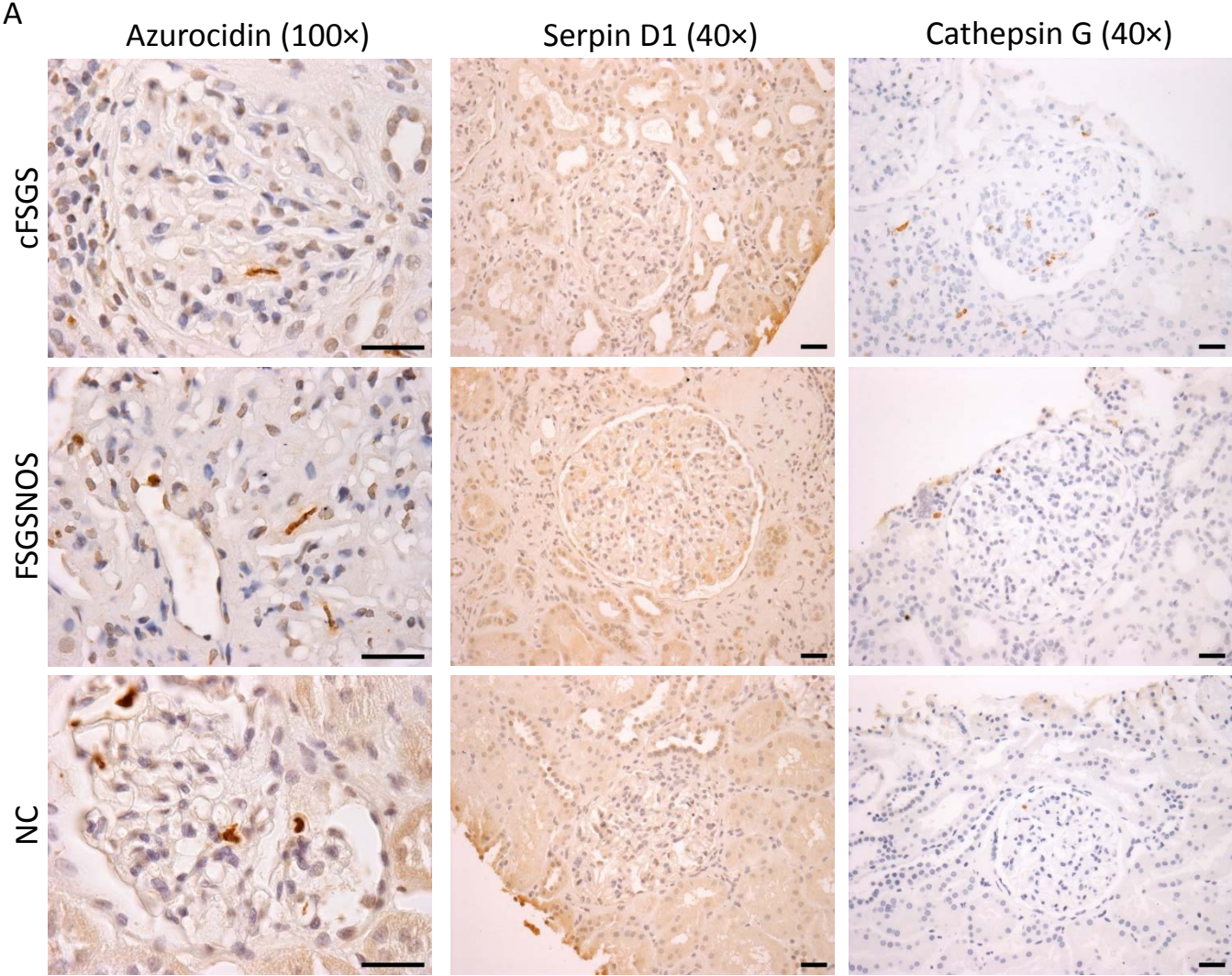


B.

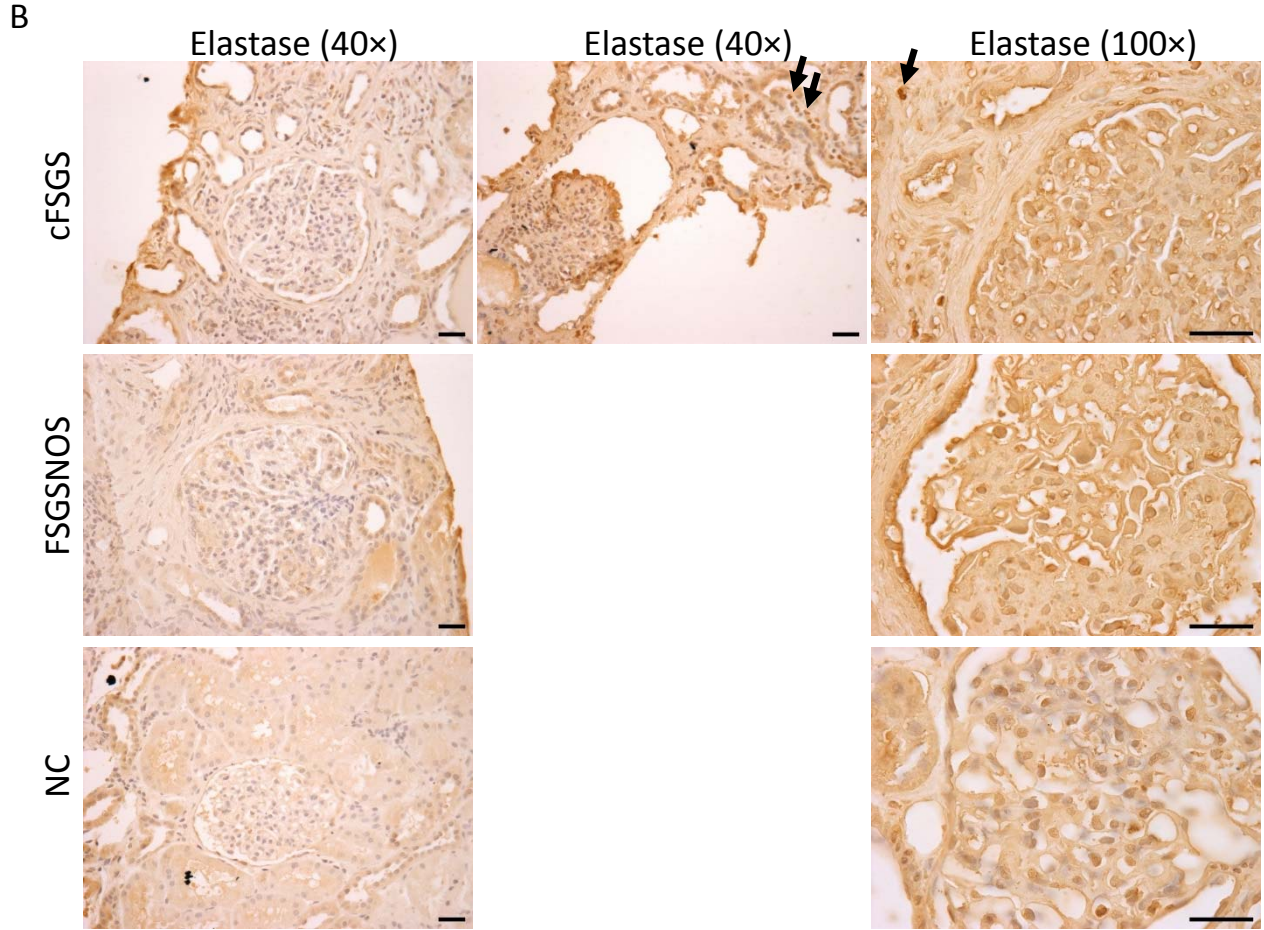


Plots of proteomic analysis of glomerular ECM enrichment. Panel A shows the number of ECM proteins identified from isolated glomerular sections from normal or FSGS-NOS biopsies by 0.1% Protease MAX alone (PMAX) or sequential decellularization with 25 mM NH_4OH / 0.5% TritonX-100 followed protein extraction by PMAX. Sequential ECM enrichment significantly increased the number of ECM proteins identified. Panel B shows the total quantity of ECM proteins, expressed as total precursor intensity (TPI), for each extraction methods for normal and FSGS-NOS glomeruli. The quantity of ECM proteins identified was greater for sequential EMC enrichment, although the difference did not reach statistical significance for the 3 samples in each group.

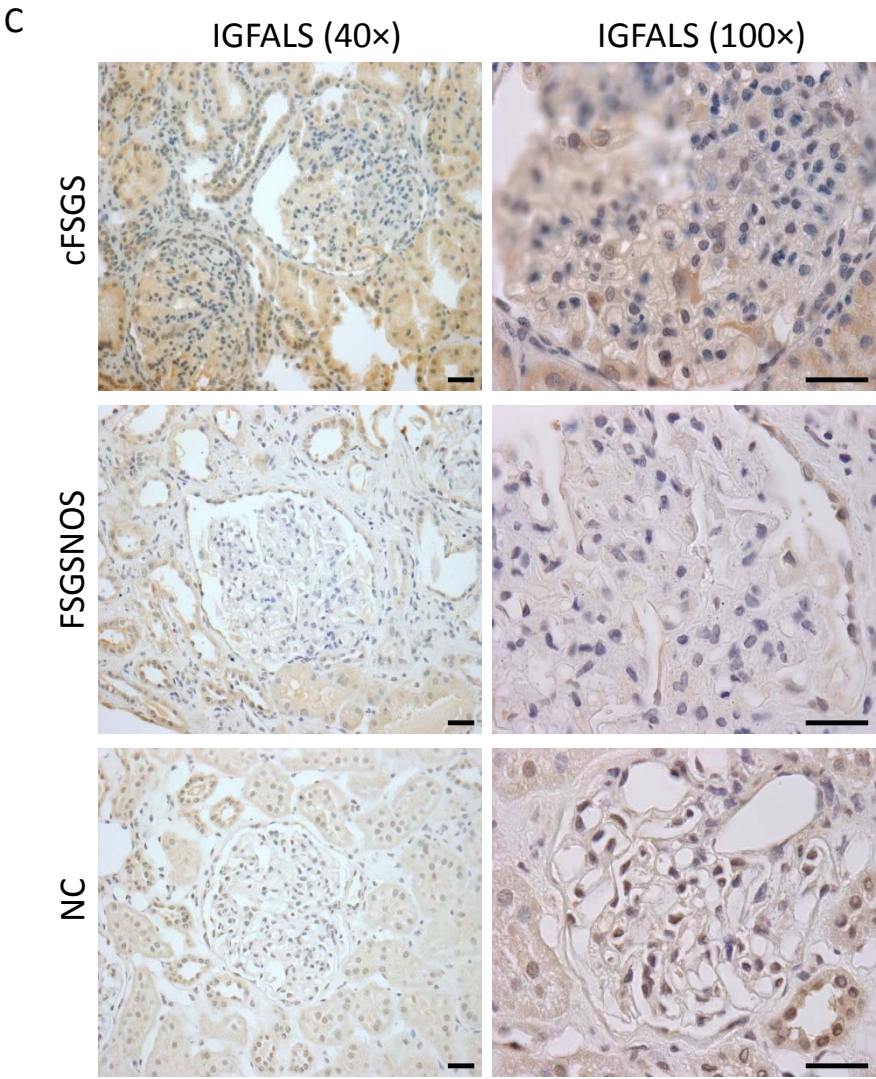
Supplemental Figure 3A..



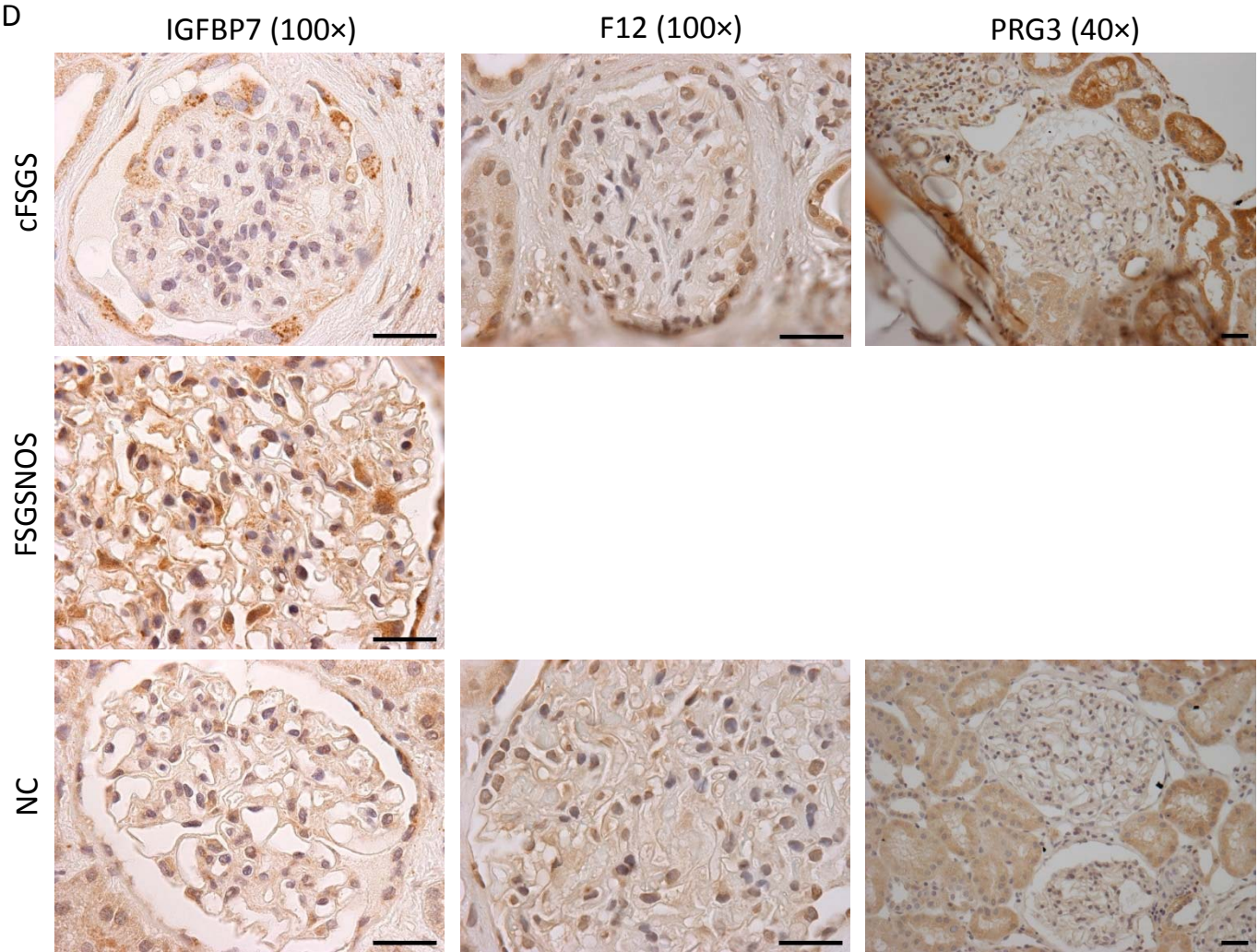
Supplemental Figure 3B.



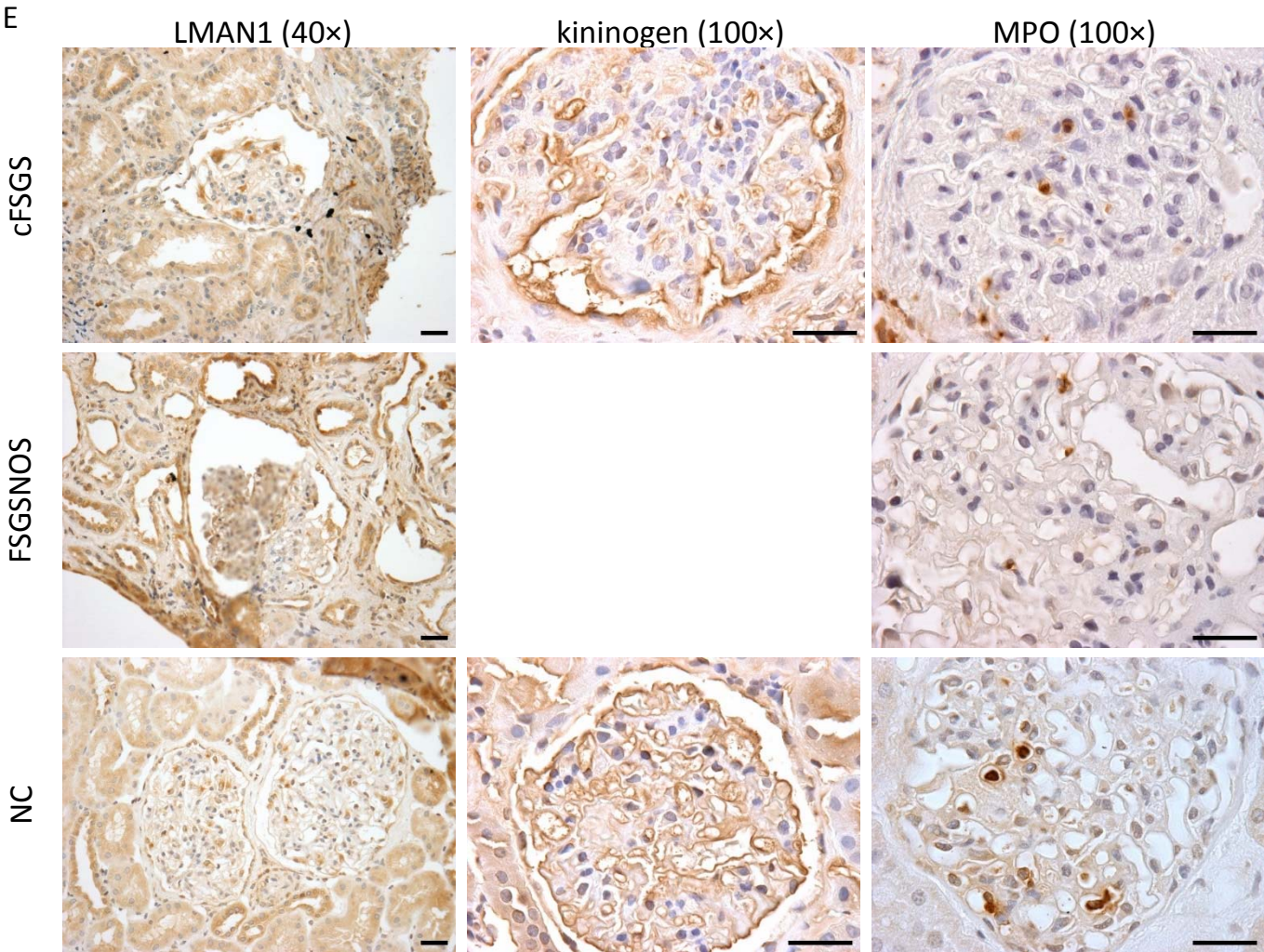
Supplemental Figure 3C.



Supplemental Figure 3D.



Supplemental Figure 3E.



Supplemental Figure 3. Immunostaining of renal biopsy sections from patients with cFSGS, FSGS-NOS, and normal controls. A, immunohistochemistry for azurocidin (AZU1), serpin D1, and cathepsin G (CTSG). B, Immunohistochemistry for elastase (ELANE). Black arrows indicate positive staining of neutrophils using anti-elastase antibody. C, immunohistochemistry for HTRA1. D, IGFBP7 immunohistochemistry. E, IGFBP7, F12, and PRG3 immunohistochemistry. F, LMAN1, kininogen, and MPO immunohistochemistry. G, immunohistochemistry of fibulin 5. Original magnification of images indicated above panels. Immunohistochemistry was performed as described in methods section using the following primary antibodies: Azurocidin (1:100; #181989, Abcam), serpin D1 (1:200; #HPA055767, Sigma), cathepsin G (1:25; #PA5 83878, ThermoFisher, Waltham, MA), neutrophil elastase (1:200; #21595, Abcam), GFALS (1:100; #HPA040948, Sigma), IGFBP7 (1:100; #HpA002196, Sigma), F12 (1:20; #HPA003825, Sigma), PRG3 (1:2500; #204606, Abcam), LMAN1 (1:500; #13364-1, ProteinTech), kininogen 1 (1:100; #AF1569, R&D Systems), and MPO (1:200; #9535, Abcam),

Supplemental Table 1. All Glomerular Proteins Identified and Statistical Evaluation of Abundance among cFSGS, FSGS-NOS, and NC							
Protein	Gene Name	Log2 FC (cFSGS: FSGS-NOS)	Log2 FC (cFSGS:NC)	Log2 FC (FSGS-NOS: NC)	q-value (cFSGS: FSGS-NOS)	q-value (cFSGS:NC)	q-value (FSGS-NOS: NC)
Alpha-1B-glycoprotein	A1BG	1.0151	-0.4909	-1.1737	0.5259	0.7695	0.4500
Cluster of Alpha-2-macroglobulin	A2M	2.6992	-1.4578	-3.2707	0.0561	0.3078	0.0239
Isoform 2 of Alanine--tRNA ligase, cytoplasmic	AARS	-0.5617	1.4098	1.7672	0.7504	0.3238	0.2300
4-aminobutyrate aminotransferase, mitochondrial	ABAT	-8.6382	-5.7429	0.2465	0.0000	0.0003	0.8888
Isoform 9 of Multidrug resistance-associated protein 1	ABCC1	0.0563	-0.7461	-0.7710	0.9724	0.6423	0.6393
ATP-binding cassette sub-family E member 1	ABCE1	-3.2356	-0.2629	1.9465	0.0227	0.8708	0.1824
ATP-binding cassette sub-family F member 1	ABCF1	-0.1855	1.9472	2.0385	0.9225	0.1611	0.1586
Protein ABHD14B	ABHD14B	3.0129	-4.7312	-6.6989	0.0334	0.0017	0.0001
Isoform 11 of Abl interactor 1	ABI1	-4.9137	6.0089	9.2488	0.0011	0.0002	0.0000
3-ketoacyl-CoA thiolase, peroxisomal	ACAA1	-4.3481	-0.2332	2.7337	0.0030	0.8857	0.0560
3-ketoacyl-CoA thiolase, mitochondrial	ACAA2	1.8356	0.5284	-0.7318	0.2036	0.7497	0.6557
Isoform 2 of Medium-chain specific acyl-CoA dehydrogenase, mitochondrial	ACADM	0.3254	0.3337	0.1059	0.8591	0.8411	0.9517
Short/branched chain specific acyl-CoA dehydrogenase, mitochondrial	ACADSB	-7.3467	-1.4250	3.6066	0.0000	0.3175	0.0146
Cluster of Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	ACADVL	1.5174	4.5788	3.4624	0.3051	0.0021	0.0180
Acetyl-CoA acetyltransferase, mitochondrial	ACAT1	-2.4956	-2.9313	-1.1781	0.0765	0.0339	0.4488
Golgi resident protein GCP60	ACBD3	-2.8733	0.0967	2.0528	0.0422	0.9509	0.1553
Isoform 4 of Apoptotic chromatin condensation inducer in the nucleus	ACIN1	-0.9614	-0.9029	-0.2315	0.5498	0.5568	0.8968
ATP-citrate synthase	ACLY	-1.0130	-0.6777	0.0248	0.5264	0.6724	0.9870
Cytoplasmic aconitate hydratase	ACO1	0.3244	-2.1433	-2.3257	0.8592	0.1199	0.1022
Aconitate hydratase, mitochondrial	ACO2	-1.3953	-2.6893	-1.6901	0.3499	0.0513	0.2535
Acyl-coenzyme A thioesterase 2, mitochondrial	ACOT2	-7.6752	1.0843	6.2945	0.0000	0.4689	0.0002
Acyl-coenzyme A thioesterase 9, mitochondrial	ACOT9	5.8542	3.2381	-0.8093	0.0002	0.0199	0.6242
Isoform 3 of Medium-chain acyl-CoA ligase ACSF2, mitochondrial	ACSF2	-0.8032	-1.3565	-0.7847	0.6339	0.3469	0.6346

Cluster of Actin, aortic smooth muscle	ACTA2	0.3967	-1.2321	-1.4802	0.8249	0.3982	0.3246
Cluster of Alpha-actinin-4	ACTN4	-2.1496	-3.2524	-1.7290	0.1288	0.0194	0.2407
Alpha-centractin	ACTR1A	-0.1514	-0.7853	-0.6679	0.9388	0.6214	0.6868
Beta-centractin	ACTR1B	1.0611	1.1467	0.4030	0.5029	0.4383	0.8208
Actin-related protein 2	ACTR2	0.3351	-1.0787	-1.2876	0.8538	0.4710	0.3993
Cluster of Actin-related protein 3	ACTR3	-0.4561	-1.5688	-1.2297	0.7998	0.2646	0.4244
Aminoacylase-1	ACY1	-2.2095	-8.9696	-7.3025	0.1188	0.0000	0.0000
Isoform 2 of Alpha-adducin	ADD1	-4.7832	-2.2626	1.0373	0.0014	0.1000	0.5078
Isoform 1 of Gamma-adducin	ADD3	2.5534	0.9597	-0.7975	0.0696	0.5291	0.6296
Cluster of Alcohol dehydrogenase 1C	ADH1C	-28.5069	0.5603	19.9744	0.0000	0.7291	0.0000
Isoform 2 of All-trans-retinol dehydrogenase [NAD(+)] ADH4	ADH4	-15.5666	-1.3800	9.2518	0.0000	0.3354	0.0000
Alcohol dehydrogenase class-3	ADH5	2.1858	1.2415	-0.2702	0.1223	0.3947	0.8827
Adipogenesis regulatory factor	ADIRF	-0.5879	0.5712	0.9616	0.7395	0.7234	0.5389
Afamin	AFM	7.9925	4.7584	-0.7733	0.0000	0.0016	0.6387
Agmatinase, mitochondrial	AGMAT	-24.3199	-17.2970	-0.4141	0.0000	0.0000	0.8142
Isoform 6 of Agrin	AGRN	1.2671	-1.4182	-2.2561	0.4033	0.3198	0.1147
Angiotensinogen	AGT	0.4952	0.3063	-0.0366	0.7785	0.8524	0.9804
Serine--pyruvate aminotransferase	AGXT	-15.0317	-2.7725	7.5198	0.0000	0.0449	0.0000
Adenosylhomocysteinase	AHCY	-7.6873	-4.0515	1.2595	0.0000	0.0052	0.4117
Cluster of Neuroblast differentiation-associated protein AHNAK	AHNAK	0.5324	-0.7235	-1.0733	0.7673	0.6504	0.4918
Alpha-2-HS-glycoprotein	AHSG	6.2917	-3.5884	-7.8108	0.0001	0.0113	0.0000
Cluster of Allograft inflammatory factor 1	AIF1	-0.5635	-11.8705	11.2726	0.7504	0.0000	0.0000
Isoform 2 of Allograft inflammatory factor 1-like	AIF1L	-0.5319	-8.9853	-8.4609	0.7673	0.0000	0.0000
Isoform 3 of Apoptosis-inducing factor 1, mitochondrial	AIFM1	-4.3816	-0.8210	2.1794	0.0029	0.6018	0.1284
AH receptor-interacting protein	AIP	-1.9584	2.1171	3.4134	0.1721	0.1236	0.0193
Adenylate kinase isoenzyme 1	AK1	-1.3917	-3.3940	-2.3845	0.3506	0.0153	0.0931
Cluster of Isoform 2 of Adenylate kinase 2, mitochondrial	AK2	-2.4020	-0.6430	1.0052	0.0887	0.6919	0.5195
GTP:AMP phosphotransferase AK3, mitochondrial	AK3	1.0924	0.2234	-0.5250	0.4868	0.8897	0.7630
Isoform 2 of A-kinase anchor protein 12	AKAP12	3.3245	1.8221	-0.4760	0.0195	0.1938	0.7812
Isoform 2 of A-kinase anchor protein 2	AKAP2	-0.0556	-0.5220	-0.4747	0.9724	0.7521	0.7812
Aldo-keto reductase family 1 member A1	AKR1A1	-2.5097	-4.7174	-2.9223	0.0747	0.0017	0.0409
Aflatoxin B1 aldehyde reductase member 2	AKR7A2	-0.2926	-1.0266	-0.8087	0.8710	0.4957	0.6242
Isoform 2 of Delta-aminolevulinic acid dehydratase	ALAD	-0.5061	-12.0505	11.4884	0.7769	0.0000	0.0000
Serum albumin	ALB	0.5758	-2.9058	-3.2458	0.7463	0.0354	0.0248

Cluster of Aldehyde dehydrogenase family 16 member A1	ALDH16A1	-4.3485	-2.4012	0.6051	0.0030	0.0810	0.7208
Retinal dehydrogenase 1	ALDH1A1	-2.5779	-0.8398	0.9318	0.0677	0.5909	0.5553
Isoform 2 of Retinal dehydrogenase 2	ALDH1A2	0.8712	-0.9081	-1.4853	0.5979	0.5537	0.3234
Aldehyde dehydrogenase X, mitochondrial	ALDH1B1	-1.3535	3.1433	4.0089	0.3657	0.0233	0.0072
Isoform 3 of Cytosolic 10-formyltetrahydrofolate dehydrogenase	ALDH1L1	-13.8453	-0.5788	8.8656	0.0000	0.7196	0.0000
Aldehyde dehydrogenase, mitochondrial	ALDH2	-2.0134	-2.0998	-0.6900	0.1592	0.1268	0.6726
Isoform 3 of Delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial	ALDH4A1	-1.0092	-0.5134	0.1835	0.5273	0.7579	0.9143
Isoform 2 of Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial	ALDH6A1	-10.4455	-0.8204	6.3118	0.0000	0.6018	0.0002
Alpha-aminoadipic semialdehyde dehydrogenase	ALDH7A1	-1.1658	-3.4421	-2.5857	0.4486	0.0141	0.0690
Isoform 3 of 4-trimethylaminobutyraldehyde dehydrogenase	ALDH9A1	0.3762	-5.4678	-5.6256	0.8347	0.0005	0.0005
Fructose-bisphosphate aldolase A	ALDOA	0.9186	-2.5717	-3.1513	0.5695	0.0615	0.0288
Fructose-bisphosphate aldolase B	ALDOB	-1.5029	-3.0196	-1.9411	0.3121	0.0289	0.1836
Fructose-bisphosphate aldolase C	ALDOC	3.0791	-0.4710	-2.5606	0.0297	0.7796	0.0715
Protein AMBP	AMBP	-0.3624	1.6890	1.9055	0.8423	0.2275	0.1924
Isoform 2 of Anaphase-promoting complex subunit 7	ANAPC7	-1.3244	-0.9641	-0.0443	0.3792	0.5273	0.9771
Angiopoietin-related protein 6	ANGPTL6	2.5380	2.8739	1.0928	0.0713	0.0376	0.4839
Acidic leucine-rich nuclear phosphoprotein 32 family member A	ANP32A	-10.5988	-0.3903	6.8386	0.0000	0.8180	0.0001
Aminopeptidase N	ANPEP	-0.4024	-3.5025	-3.1653	0.8234	0.0128	0.0282
Annexin A1	ANXA1	-0.6835	2.3181	2.7421	0.6939	0.0920	0.0554
Isoform 2 of Annexin A11	ANXA11	-0.2915	-0.0563	0.1433	0.8710	0.9683	0.9298
Isoform 2 of Annexin A2	ANXA2	0.9514	-0.3682	-1.0098	0.5558	0.8268	0.5174
Annexin A3	ANXA3	8.3276	5.3101	-0.4599	0.0000	0.0006	0.7890
Annexin A4	ANXA4	0.2195	1.6441	1.4648	0.9047	0.2417	0.3299
Annexin A5	ANXA5	1.2337	-0.0677	-0.9070	0.4182	0.9614	0.5699
Annexin A6	ANXA6	0.0450	0.7661	0.7217	0.9751	0.6331	0.6595
Isoform 2 of Annexin A7	ANXA7	0.1648	5.8962	5.6776	0.9318	0.0003	0.0005
Isoform 2 of AP-1 complex subunit gamma-1	AP1G1	2.6435	-0.1170	-1.9161	0.0614	0.9410	0.1900
Cluster of Isoform B of AP-2 complex subunit alpha-1	AP2A1	0.2831	-1.4202	-1.5875	0.8743	0.3192	0.2869
Cluster of Isoform 2 of AP-2 complex subunit beta	AP2B1	0.5719	-2.6394	-2.9816	0.7463	0.0557	0.0380
Isoform 5 of AP-3 complex subunit delta-1	AP3D1	1.0411	-1.1085	-1.7980	0.5122	0.4555	0.2233

Serum amyloid P-component	APCS	-0.5919	2.5343	2.8919	0.7388	0.0653	0.0427
Acylamino-acid-releasing enzyme	APEH	-5.0774	-0.0595	3.4012	0.0008	0.9664	0.0194
DNA-(apurinic or apyrimidinic site) lyase	APEX1	1.4445	1.2552	0.2483	0.3307	0.3888	0.8888
Adipocyte plasma membrane-associated protein	APMAP	-1.1919	-1.0786	-0.2471	0.4378	0.4710	0.8888
Apolipoprotein A-I	APOA1	1.9958	-1.0651	-2.4058	0.1633	0.4755	0.0913
Apolipoprotein A-II	APOA2	1.5341	-2.6289	-3.6268	0.3002	0.0565	0.0141
Apolipoprotein A-IV	APOA4	0.7671	0.7852	0.2484	0.6530	0.6214	0.8888
Apolipoprotein B-100	APOB	2.1637	1.2362	-0.2604	0.1266	0.3970	0.8853
Apolipoprotein C-III	APOC3	13.4802	8.4259	-0.9111	0.0000	0.0000	0.5675
Apolipoprotein D	APOD	0.6937	5.8298	5.2521	0.6887	0.0003	0.0009
Apolipoprotein E	APOE	0.6407	1.8742	1.4038	0.7156	0.1800	0.3533
Beta-2-glycoprotein 1	APOH	1.3239	-0.0197	-0.9215	0.3792	0.9880	0.5616
Apolipoprotein L2	APOL2	0.8392	0.8128	0.2264	0.6146	0.6054	0.8976
Adenine phosphoribosyltransferase	APRT	1.1287	-0.9639	-1.7156	0.4689	0.5273	0.2452
Isoform 2 of Aquaporin-1	AQP1	1.6824	4.4002	3.1745	0.2490	0.0029	0.0277
Cluster of ADP-ribosylation factor 3	ARF3	2.0879	-1.7903	-3.1808	0.1430	0.2003	0.0276
ADP-ribosylation factor 6	ARF6	-21.9569	-14.0280	1.1858	0.0000	0.0000	0.4463
Isoform 2 of Arginase-1	ARG1	-7.8676	-1.1293	4.2520	0.0000	0.4459	0.0049
Rho GTPase-activating protein 1	ARHGAP1	0.7988	1.2063	0.6403	0.6356	0.4096	0.7033
Rho GDP-dissociation inhibitor 1	ARHGDI1	0.3364	-2.1512	-2.3417	0.8538	0.1187	0.0995
Rho GDP-dissociation inhibitor 2	ARHGDI2	1.3795	-3.2528	-4.1341	0.3551	0.0194	0.0059
Rho guanine nucleotide exchange factor 12	ARHGEF12	-0.3434	-0.1057	0.1302	0.8507	0.9469	0.9349
Rho guanine nucleotide exchange factor 15	ARHGEF15	-0.8780	-1.6218	-0.9943	0.5939	0.2490	0.5240
Rho guanine nucleotide exchange factor 17	ARHGEF17	-0.2922	-0.3746	-0.1687	0.8710	0.8251	0.9236
PRA1 family protein 3	ARL6IP5	0.1944	11.5574	11.2166	0.9192	0.0000	0.0000
Isoform 2 of Actin-related protein 2/3 complex subunit 1A	ARPC1A	-0.7039	-12.1002	11.4026	0.6868	0.0000	0.0000
Actin-related protein 2/3 complex subunit 1B	ARPC1B	-1.2899	4.3147	5.1159	0.3932	0.0033	0.0011
Actin-related protein 2/3 complex subunit 2	ARPC2	-1.1726	-1.0906	-0.2719	0.4458	0.4661	0.8827
Actin-related protein 2/3 complex subunit 3	ARPC3	-1.8801	-2.3415	-1.0182	0.1915	0.0894	0.5159
Cluster of Isoform 3 of Actin-related protein 2/3 complex subunit 4	ARPC4	1.3566	8.6270	7.5472	0.3651	0.0000	0.0000
Isoform 2 of Actin-related protein 2/3 complex subunit 5	ARPC5	-0.2299	11.2647	11.2183	0.8996	0.0000	0.0000
Isoform 1B of Beta-arrestin-1	ARRB1	-1.1414	-2.5952	-1.7707	0.4624	0.0595	0.2293
Isoform 3 of Acid ceramidase	ASAH1	8.7929	5.3324	-0.7550	0.0000	0.0006	0.6439
Argininosuccinate synthase	ASS1	-0.3724	-4.5406	-4.2051	0.8366	0.0023	0.0053

Isoform 2 of Bifunctional purine biosynthesis protein PURH	ATIC	2.8201	0.7295	-1.2052	0.0457	0.6499	0.4361
Cluster of Sodium/potassium-transporting ATPase subunit alpha-2	ATP1A2	-20.5250	-2.0909	11.9322	0.0000	0.1282	0.0000
Sodium/potassium-transporting ATPase subunit alpha-4	ATP1A4	-3.5869	-0.2962	2.1532	0.0122	0.8561	0.1335
Isoform 2 of Sodium/potassium-transporting ATPase subunit beta-1	ATP1B1	0.3273	-0.2866	-0.5045	0.8582	0.8599	0.7716
Isoform 2 of Sarcoplasmic/endoplasmic reticulum calcium ATPase 2	ATP2A2	0.9844	1.1159	0.4250	0.5387	0.4522	0.8077
Cluster of Isoform XG of Plasma membrane calcium-transporting ATPase 3	ATP2B3	-3.4688	-0.7640	1.6133	0.0148	0.6341	0.2782
ATP synthase subunit alpha, mitochondrial	ATP5F1A	0.3367	-0.1574	-0.3840	0.8538	0.9183	0.8288
ATP synthase subunit beta, mitochondrial	ATP5F1B	-0.1567	-0.4901	-0.3745	0.9364	0.7696	0.8348
Cluster of ATP synthase subunit gamma, mitochondrial	ATP5F1C	0.3428	-0.9206	-1.1376	0.8507	0.5484	0.4639
ATP synthase subunit delta, mitochondrial	ATP5F1D	13.8534	8.3876	-1.2031	0.0000	0.0000	0.4365
Isoform 2 of ATP synthase subunit f, mitochondrial	ATP5MF	-1.7155	0.8504	2.0040	0.2386	0.5852	0.1669
ATP synthase subunit d, mitochondrial	ATP5PD	-0.4815	-0.6060	-0.2670	0.7863	0.7083	0.8827
ATP synthase subunit O, mitochondrial	ATP5PO	0.9632	0.5987	-0.0685	0.5496	0.7093	0.9656
V-type proton ATPase catalytic subunit A	ATP6V1A	-1.0111	-0.8972	-0.1920	0.5264	0.5584	0.9101
Cluster of V-type proton ATPase subunit B, brain isoform	ATP6V1B2	-2.6154	-2.8100	-0.9773	0.0638	0.0421	0.5316
Zinc-alpha-2-glycoprotein	AZGP1	1.4836	0.2085	-0.8062	0.3177	0.8954	0.6255
Azurocidin	AZU1	12.4662	8.2989	-0.3449	0.0000	0.0000	0.8452
Beta-2-microglobulin	B2M	-4.6045	10.3908	13.3410	0.0019	0.0000	0.0000
BAG family molecular chaperone regulator 3	BAG3	4.1458	2.1141	-0.7489	0.0045	0.1239	0.6470
Isoform 5 of Large proline-rich protein BAG6	BAG6	6.0238	3.6648	-0.5058	0.0002	0.0100	0.7716
Barrier-to-autointegration factor	BANF1	1.2776	-0.8889	-1.7434	0.3988	0.5629	0.2362
Brain acid soluble protein 1	BASP1	-0.5271	1.8084	2.1350	0.7688	0.1960	0.1373
Isoform Epsilon of Apoptosis regulator BAX	BAX	7.3761	3.7373	-1.3560	0.0000	0.0089	0.3712
Basal cell adhesion molecule	BCAM	-0.1787	-3.3822	-3.1995	0.9267	0.0156	0.0266
Bcl-2-like protein 13	BCL2L13	0.7391	2.4051	1.8582	0.6696	0.0805	0.2058
3-hydroxybutyrate dehydrogenase type 2	BDH2	3.5290	7.2248	4.6900	0.0134	0.0000	0.0024
Biglycan	BGN	-0.0659	2.9734	2.9647	0.9677	0.0314	0.0388
Betaine--homocysteine S-methyltransferase 1	BHMT	-2.3332	-2.9920	-1.3483	0.0987	0.0304	0.3747
Bleomycin hydrolase	BLMH	-0.4315	2.8208	3.0640	0.8111	0.0414	0.0328

Flavin reductase (NADPH)	BLVRB	-9.4825	-9.0625	-2.4380	0.0000	0.0000	0.0865
Isoform 2 of ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 2	BST1	-1.0074	-7.5032	-6.6815	0.5280	0.0000	0.0001
Isoform 2 of Ester hydrolase C11orf54	C11orf54	-3.5505	-5.5669	-3.0473	0.0129	0.0004	0.0335
Complement C1q subcomponent subunit A	C1QA	5.6799	0.4666	-3.4120	0.0003	0.7820	0.0193
Complement C1q subcomponent subunit B	C1QB	11.2660	0.3460	-7.3367	0.0000	0.8348	0.0000
Complement component 1 Q subcomponent-binding protein, mitochondrial	C1QBP	8.3834	-1.5717	-7.2557	0.0000	0.2637	0.0000
Complement C1q subcomponent subunit C	C1QC	5.7094	0.6256	-3.2760	0.0003	0.7004	0.0239
Complement C1r subcomponent	C1R	17.0424	9.5813	-2.2038	0.0000	0.0000	0.1250
Complement C1s subcomponent	C1S	9.6355	5.2744	-1.3861	0.0000	0.0007	0.3601
Complement C3	C3	2.2095	0.1593	-1.3491	0.1188	0.9182	0.3747
Cluster of Complement C4-B	C4B	4.5798	0.1814	-2.9424	0.0020	0.9077	0.0401
C4b-binding protein alpha chain	C4BPA	3.9987	4.0702	1.2722	0.0058	0.0051	0.4063
Isoform 2 of C4b-binding protein beta chain	C4BPB	11.6033	7.9793	-0.0707	0.0000	0.0000	0.9647
Complement C5	C5	0.9183	2.2800	1.6132	0.5695	0.0977	0.2782
Complement component C6	C6	1.4245	1.2451	0.2520	0.3382	0.3935	0.8881
Complement component C7	C7	0.6379	0.8778	0.4273	0.7168	0.5705	0.8071
Complement component C8 alpha chain	C8A	0.5318	1.8183	1.4232	0.7673	0.1938	0.3471
Complement component C8 beta chain	C8B	0.6091	2.1306	1.6772	0.7343	0.1214	0.2571
Complement component C8 gamma chain	C8G	1.1325	1.0840	0.2928	0.4669	0.4689	0.8769
Complement component C9	C9	1.1164	0.6296	-0.1424	0.4730	0.6991	0.9298
Carbonic anhydrase 1	CA1	-3.0935	-4.0035	-1.8235	0.0289	0.0057	0.2160
Carbonic anhydrase 2	CA2	-0.0530	-2.6731	-2.5888	0.9730	0.0526	0.0689
Calbindin	CALB1	-0.2473	-12.4635	12.0704	0.8904	0.0000	0.0000
Caldesmon	CALD1	-1.7124	-0.1583	1.0114	0.2391	0.9183	0.5174
Calmodulin-2	CALM2	1.4613	-0.9122	-1.8915	0.3258	0.5526	0.1959
Calmodulin-like protein 5	CALML5	2.8236	5.4686	3.4461	0.0455	0.0005	0.0184
Calreticulin	CALR	2.6809	-0.7296	-2.5432	0.0579	0.6499	0.0733
Cullin-associated NEDD8-dissociated protein 1	CAND1	2.0014	-2.0920	-3.4181	0.1625	0.1282	0.0192
Isoform 2 of Cullin-associated NEDD8-dissociated protein 2	CAND2	0.1868	0.4537	0.3182	0.9221	0.7895	0.8617
Isoform 2 of Calnexin	CANX	-0.7186	-0.3107	0.1845	0.6787	0.8505	0.9142
Cluster of Adenylyl cyclase-associated protein 1	CAP1	0.5333	-0.4628	-0.8179	0.7673	0.7845	0.6202
Cluster of Isoform 2 of Macrophage-capping protein	CAPG	16.6289	10.3974	-1.1206	0.0000	0.0000	0.4728
Calpain-1 catalytic subunit	CAPN1	1.9592	-1.5928	-2.8991	0.1721	0.2572	0.0422

Cluster of Calpain-2 catalytic subunit	CAPN2	1.0418	-2.6993	-3.3605	0.5122	0.0504	0.0205
Calpain small subunit 1	CAPNS1	1.1331	-1.5931	-2.3365	0.4669	0.2572	0.1003
Caprin-1	CAPRIN1	4.7379	2.6202	-0.6554	0.0015	0.0570	0.6934
F-actin-capping protein subunit alpha-1	CAPZA1	-1.3324	-0.5822	0.3361	0.3756	0.7182	0.8500
F-actin-capping protein subunit alpha-2	CAPZA2	0.1442	-1.9060	-1.9700	0.9409	0.1709	0.1767
Isoform 2 of F-actin-capping protein subunit beta	CAPZB	-1.2723	-3.8580	-2.9215	0.4011	0.0073	0.0409
Isoform 2 of Peripheral plasma membrane protein CASK	CASK	-1.1069	-1.8444	-1.0570	0.4784	0.1878	0.5006
Caspase-14	CASP14	-1.0237	-0.2384	0.4634	0.5219	0.8842	0.7874
Catalase	CAT	-1.5935	-3.3289	-2.1831	0.2794	0.0170	0.1283
Caveolae-associated protein 1	CAVIN1	3.1578	11.9789	9.6114	0.0259	0.0000	0.0000
Caveolae-associated protein 2	CAVIN2	0.8873	-0.5279	-1.1230	0.5885	0.7497	0.4717
Cluster of Carbonyl reductase [NADPH] 1	CBR1	-1.2578	-1.0700	-0.1937	0.4057	0.4739	0.9094
Cluster of Chromobox protein homolog 3	CBX3	1.6214	1.4041	0.2740	0.2695	0.3259	0.8827
Isoform 2 of Cell cycle and apoptosis regulator protein 2	CCAR2	-4.3483	-0.4284	2.5422	0.0030	0.7991	0.0733
Coiled-coil domain-containing protein 22	CCDC22	-3.0982	-0.4592	1.6601	0.0288	0.7862	0.2636
Cluster of T-complex protein 1 subunit beta	CCT2	0.1399	-0.9223	-1.0010	0.9420	0.5484	0.5203
T-complex protein 1 subunit gamma	CCT3	-0.1285	-0.8370	-0.7343	0.9468	0.5920	0.6551
Isoform 2 of T-complex protein 1 subunit delta	CCT4	-0.5107	-1.4394	-1.0654	0.7759	0.3130	0.4957
Cluster of Isoform 2 of T-complex protein 1 subunit epsilon	CCT5	7.8255	5.1522	-0.2729	0.0000	0.0008	0.8827
Cluster of T-complex protein 1 subunit zeta	CCT6A	1.9930	-1.4218	-2.7542	0.1639	0.3188	0.0542
T-complex protein 1 subunit eta	CCT7	2.1321	-0.1156	-1.5664	0.1328	0.9410	0.2934
T-complex protein 1 subunit theta	CCT8	-0.2049	-3.1286	-2.9327	0.9141	0.0239	0.0403
Isoform 3 of CD276 antigen	CD276	13.7137	8.0973	-1.3929	0.0000	0.0000	0.3581
CD2-associated protein	CD2AP	-1.1207	-0.1750	0.5917	0.4705	0.9109	0.7284
Isoform 5 of CD44 antigen	CD44	-4.1384	-0.2818	2.5431	0.0045	0.8626	0.0733
CD5 antigen-like	CD5L	8.5403	4.6190	-1.2835	0.0000	0.0020	0.4008
CD81 antigen	CD81	-17.3127	-11.1998	0.7986	0.0000	0.0000	0.6296
Hsp90 co-chaperone Cdc37	CDC37	1.4144	1.4463	0.4565	0.3419	0.3103	0.7900
Cell division control protein 42 homolog	CDC42	-0.8620	-2.3169	-1.6878	0.6021	0.0920	0.2541
Isoform 4 of Cadherin-13	CDH13	2.5603	2.5540	0.7634	0.0688	0.0632	0.6422
Isoform 2 of Cadherin-5	CDH5	-7.1495	-1.9671	2.9399	0.0000	0.1567	0.0401
Isoform 2 of CDK5 regulatory subunit-associated protein 3	CDK5RAP3	2.6439	0.7621	-1.0531	0.0614	0.6348	0.5028
Cyclin-dependent kinase inhibitor 1B	CDKN1B	-0.2701	-5.7506	-5.4630	0.8806	0.0003	0.0007

Corneodesmosin	CDSN	-21.7780	-2.3285	12.5526	0.0000	0.0908	0.0000
Cluster of Isoform 3 of Protein CDV3 homolog	CDV3	-19.4650	0.2973	13.5551	0.0000	0.8558	0.0000
Isoform 2 of Liver carboxylesterase 1	CES1	-24.9126	-1.5880	15.4157	0.0000	0.2590	0.0000
Complement factor B	CFB	2.8647	-0.1702	-2.1190	0.0427	0.9131	0.1407
Complement factor D	CFD	-13.3153	-1.3804	7.7173	0.0000	0.3354	0.0000
Complement factor H	CFH	0.4007	-0.0404	-0.3127	0.8234	0.9767	0.8657
Complement factor H-related protein 1	CFHR1	-0.4110	0.5247	0.7953	0.8205	0.7508	0.6305
Isoform Short of Complement factor H-related protein 2	CFHR2	-0.9231	2.9766	3.5520	0.5675	0.0313	0.0157
Complement factor H-related protein 5	CFHR5	0.1634	-1.2319	-1.3211	0.9322	0.3982	0.3850
Cluster of Cofilin-1	CFL1	0.8665	0.7465	0.1426	0.5998	0.6423	0.9298
Properdin	CFP	2.5635	3.2563	1.4509	0.0685	0.0194	0.3347
Cingulin-like protein 1	CGNL1	-0.0623	-3.0965	-2.9982	0.9691	0.0252	0.0368
Putative coiled-coil-helix-coiled-coil-helix domain-containing protein CHCHD2P9, mitochondrial	CHCHD2P9	-20.6813	-0.2135	13.8823	0.0000	0.8938	0.0000
MIC complex subunit MIC19	CHCHD3	2.9336	3.5502	1.4873	0.0378	0.0120	0.3234
Charged multivesicular body protein 5	CHMP5	0.1871	-2.3894	-2.4738	0.9221	0.0825	0.0812
Isoform 2 of Cold-inducible RNA-binding protein	CIRBP	0.9620	-0.8895	-1.5290	0.5498	0.5629	0.3079
Cytoskeleton-associated protein 4	CKAP4	1.3561	-1.7740	-2.6661	0.3651	0.2042	0.0615
Creatine kinase B-type	CKB	-2.0990	-4.2005	-2.6946	0.1403	0.0041	0.0586
Chloride intracellular channel protein 1	CLIC1	1.8630	-1.1849	-2.4330	0.1951	0.4198	0.0872
Chloride intracellular channel protein 4	CLIC4	14.3336	-1.3976	11.1391	0.0000	0.3286	0.0000
Isoform 1 of Chloride intracellular channel protein 5	CLIC5	-0.7561	-4.4927	-3.8966	0.6608	0.0025	0.0087
Isoform Non-brain of Clathrin light chain A	CLTA	9.3246	5.6015	-0.8531	0.0000	0.0004	0.6033
Cluster of Isoform 2 of Clathrin heavy chain 1	CLTC	0.2313	-0.9531	-1.0935	0.8991	0.5330	0.4839
Isoform 2 of Clusterin	CLU	0.5847	0.6696	0.2591	0.7408	0.6765	0.8856
Isoform 3 of UMP-CMP kinase	CMPK1	-2.3823	-5.4118	-3.6910	0.0912	0.0005	0.0126
UMP-CMP kinase 2, mitochondrial	CMPK2	10.6491	6.6151	-0.7602	0.0000	0.0001	0.6422
Cluster of Isoform 4 of Cellular nucleic acid-binding protein	CNBP	-6.3750	-0.5373	3.8163	0.0001	0.7439	0.0101
Cytosolic non-specific dipeptidase	CNDP2	-1.5011	-3.7602	-2.6697	0.3126	0.0086	0.0613
Calponin-2	CNN2	2.6126	-0.1475	-1.9250	0.0640	0.9226	0.1883
Calponin-3	CNN3	2.0771	-1.6851	-3.0701	0.1448	0.2280	0.0325
Isoform 2 of Bifunctional coenzyme A synthase	COASY	7.7026	4.6477	-0.6845	0.0000	0.0019	0.6758
Collagen alpha-1(XII) chain	COL12A1	3.8349	2.6167	-0.0435	0.0078	0.0573	0.9771
Collagen alpha-1(XV) chain	COL15A1	-2.0472	2.9388	4.2808	0.1513	0.0334	0.0047

Cluster of Collagen alpha-1(XVIII) chain	COL18A1	0.6526	0.6525	0.1960	0.7091	0.6880	0.9094
Collagen alpha-1(I) chain	COL1A1	-1.4400	-0.4323	0.5567	0.3318	0.7991	0.7456
Collagen alpha-2(I) chain	COL1A2	-3.0553	-2.3329	-0.2091	0.0309	0.0903	0.9038
Cluster of Isoform 3 of Collagen alpha-1(XXI) chain	COL21A1	3.3964	2.0730	-0.2786	0.0171	0.1311	0.8827
Isoform 1 of Collagen alpha-1(II) chain	COL2A1	1.5342	2.1415	1.0576	0.3002	0.1199	0.5006
Cluster of Collagen alpha-1(III) chain	COL3A1	-0.5720	-0.0451	0.3454	0.7463	0.9743	0.8452
Collagen alpha-1(IV) chain	COL4A1	-0.6056	0.5735	0.9758	0.7347	0.7222	0.5318
Collagen alpha-2(IV) chain	COL4A2	-1.0910	0.1162	0.8574	0.4868	0.9410	0.6017
Cluster of Collagen alpha-3(IV) chain	COL4A3	0.9354	0.9917	0.3365	0.5611	0.5128	0.8500
Collagen alpha-4(IV) chain	COL4A4	0.4966	1.3963	1.0327	0.7785	0.3288	0.5094
Isoform 2 of Collagen alpha-5(IV) chain	COL4A5	0.7552	0.2945	-0.2254	0.6608	0.8568	0.8978
Collagen alpha-1(VI) chain	COL6A1	0.0070	-1.2307	-1.2133	0.9980	0.3984	0.4324
Cluster of Collagen alpha-2(VI) chain	COL6A2	-0.2955	-0.8340	-0.6176	0.8710	0.5936	0.7143
Isoform 2 of Collagen alpha-3(VI) chain	COL6A3	-0.5125	-1.0697	-0.7012	0.7755	0.4739	0.6686
Isoform 2 of Collagen alpha-1(VII) chain	COL7A1	1.8894	0.8958	-0.4077	0.1902	0.5588	0.8176
Isoform Soluble of Catechol O-methyltransferase	COMT	0.4080	-0.9782	-1.2386	0.8208	0.5203	0.4209
Isoform 2 of Coatomer subunit alpha	COPA	0.4272	-3.5240	-3.7516	0.8134	0.0125	0.0113
Coatomer subunit beta	COPB1	1.4531	-0.0886	-1.0772	0.3284	0.9509	0.4902
Isoform 2 of Coatomer subunit beta'	COPB2	0.1725	-2.0116	-2.0929	0.9290	0.1453	0.1458
Coatomer subunit epsilon	COPE	1.4058	-0.4439	-1.3938	0.3450	0.7945	0.3581
Coatomer subunit gamma-1	COPG1	0.5031	-2.4049	-2.7044	0.7769	0.0805	0.0579
Isoform 2 of COP9 signalosome complex subunit 4	COPS4	-0.1490	-0.7242	-0.6096	0.9398	0.6504	0.7191
COP9 signalosome complex subunit 7a	COPS7A	-2.7295	0.7098	2.5568	0.0532	0.6575	0.0719
Coronin-1A	CORO1A	7.5307	5.4805	0.2505	0.0000	0.0005	0.8887
Coronin-1B	CORO1B	-0.4226	-1.5804	-1.2639	0.8143	0.2609	0.4105
Isoform 3 of Coronin-1C	CORO1C	1.6011	2.7674	1.6265	0.2765	0.0452	0.2744
Coronin-2B	CORO2B	-3.7900	2.2707	4.8122	0.0085	0.0991	0.0019
Coactosin-like protein	COTL1	1.4752	5.5963	4.4903	0.3212	0.0004	0.0033
Cytochrome c oxidase subunit 5A, mitochondrial	COX5A	16.4927	-0.3196	11.5517	0.0000	0.8457	0.0000
Cytochrome c oxidase subunit 6B1	COX6B1	-18.5672	-17.3596	-4.3954	0.0000	0.0000	0.0038
Ceruloplasmin	CP	2.2188	-0.9872	-2.4812	0.1174	0.5144	0.0804
Carboxypeptidase M	CPM	9.8248	5.6875	-1.1094	0.0000	0.0004	0.4765
Copine-1	CPNE1	1.7863	-0.3434	-1.5544	0.2165	0.8356	0.2976
Cluster of Copine-3	CPNE3	-1.6208	-0.9673	0.1545	0.2695	0.5260	0.9252

Cluster of Isoform 3 of Carbamoyl-phosphate synthase [ammonia], mitochondrial	CPS1	-23.0164	-1.6832	14.0302	0.0000	0.2285	0.0000
Cluster of Isoform 3 of Cleavage and polyadenylation specificity factor subunit 6	CPSF6	-3.5533	-0.4309	1.9980	0.0129	0.7991	0.1681
Isoform 2 of Carnitine O-palmitoyltransferase 1, liver isoform	CPT1A	3.1299	2.4481	0.2713	0.0272	0.0752	0.8827
Cluster of Complement receptor type 1	CR1	-1.1547	-3.2250	-2.3801	0.4545	0.0202	0.0934
Cluster of Protein crumbs homolog 2	CRB2	-1.3868	-3.2507	-2.2472	0.3519	0.0195	0.1164
Cysteine-rich motor neuron 1 protein	CRIM1	2.5655	1.1322	-0.6363	0.0685	0.4445	0.7047
Isoform 2 of Cysteine-rich protein 2	CRIP2	-1.2575	-1.7452	-0.8569	0.4057	0.2111	0.6017
Isoform Crk-I of Adapter molecule crk	CRK	0.6679	0.3234	-0.1375	0.7032	0.8449	0.9316
C-reactive protein	CRP	-12.2265	-1.0631	7.2870	0.0000	0.4763	0.0000
Alpha-crystallin B chain	CRYAB	2.1542	1.7232	0.2243	0.1284	0.2168	0.8979
Isoform 2 of Lambda-crystallin homolog	CRYL1	-0.4780	-0.7499	-0.4107	0.7866	0.6411	0.8158
Isoform 3 of Quinone oxidoreductase	CRYZ	-2.1002	-1.4482	0.0089	0.1403	0.3103	0.9937
Citrate synthase, mitochondrial	CS	0.4989	-0.8509	-1.1756	0.7785	0.5852	0.4493
Isoform 3 of Exportin-2	CSE1L	0.7038	-0.3757	-0.8485	0.6868	0.8248	0.6052
Chondroitin sulfate proteoglycan 4	CSPG4	-0.3980	1.2805	1.5287	0.8245	0.3789	0.3079
Cysteine and glycine-rich protein 1	CSRP1	-1.6163	-3.9041	-2.7325	0.2711	0.0068	0.0560
Cysteine and glycine-rich protein 2	CSRP2	9.6445	6.2532	-0.4311	0.0000	0.0002	0.8046
Cystatin-C	CST3	-11.3358	-2.1749	5.5883	0.0000	0.1147	0.0005
Cystatin-A	CSTA	-0.6020	5.7793	6.0853	0.7358	0.0003	0.0002
Cystatin-B	CSTB	2.2049	-2.2146	-3.6770	0.1193	0.1083	0.0129
Catenin alpha-1	CTNNA1	1.2144	-3.3729	-4.1396	0.4269	0.0158	0.0059
Isoform 2 of Catenin alpha-2	CTNNA2	-3.1681	0.3175	2.4704	0.0254	0.8460	0.0816
Catenin beta-1	CTNNB1	-0.7007	-0.9358	-0.4415	0.6868	0.5409	0.7992
Isoform 1AC of Catenin delta-1	CTNND1	-0.9402	1.9351	2.5409	0.5592	0.1637	0.0733
Cathepsin B	CTSB	-0.5312	0.3736	0.7288	0.7673	0.8252	0.6567
Dipeptidyl peptidase 1	CTSC	8.7091	5.7434	-0.2944	0.0000	0.0003	0.8763
Cathepsin D	CTSD	-1.4501	-0.3495	0.6449	0.3291	0.8337	0.7008
Cathepsin G	CTSG	11.7588	7.7294	-0.4221	0.0000	0.0000	0.8088
Cathepsin L1	CTSL	12.4592	7.6436	-0.9837	0.0000	0.0000	0.5283
Cathepsin Z	CTSZ	0.7236	0.8557	0.3472	0.6765	0.5840	0.8452
Cluster of Src substrate cortactin	CTTN	-0.7363	0.2724	0.7692	0.6712	0.8663	0.6395
Cubilin	CUBN	-1.6560	-0.0907	1.0393	0.2597	0.9509	0.5073
Isoform 2 of Cytochrome b5	CYB5A	-20.3286	-0.0621	13.7906	0.0000	0.9651	0.0000
Isoform 2 of NADH-cytochrome b5 reductase 3	CYB5R3	1.1999	0.9119	0.0778	0.4349	0.5526	0.9633

Cytochrome c1, heme protein, mitochondrial	CYC1	-0.6003	-5.7252	-5.2130	0.7365	0.0003	0.0010
Cluster of Cytoplasmic FMR1-interacting protein 1	CYFIP1	-3.8764	-1.7417	0.9310	0.0072	0.2116	0.5553
Dystroglycan	DAG1	-2.6370	-0.3280	1.4747	0.0619	0.8438	0.3261
Aspartate--tRNA ligase, cytoplasmic	DARS	-0.7296	1.2174	1.6926	0.6741	0.4037	0.2532
Isoform 2 of DAZ-associated protein 1	DAZAP1	8.9770	5.0616	-1.1464	0.0000	0.0010	0.4607
Cluster of Isoform 4 of Acyl-CoA-binding protein	DBI	-0.1681	-13.8341	13.4703	0.9306	0.0000	0.0000
Isoform 2 of Drebrin	DBN1	3.0250	1.8661	-0.2286	0.0326	0.1817	0.8970
Cluster of Isoform 2 of Drebrin-like protein	DBNL	-1.5194	-1.4477	-0.3863	0.3049	0.3103	0.8275
Dermcidin	DCD	-0.4038	3.9625	4.1663	0.8234	0.0061	0.0056
Cluster of Isoform 3 of Dynactin subunit 1	DCTN1	-1.3625	0.6509	1.5675	0.3629	0.6880	0.2934
Isoform 2 of Dynactin subunit 2	DCTN2	-1.5710	-0.2989	0.7769	0.2881	0.8551	0.6381
Isoform 2 of Dynactin subunit 4	DCTN4	-0.9963	-5.4604	-4.6831	0.5326	0.0005	0.0024
L-xylulose reductase	DCXR	-24.1547	-2.1224	14.3745	0.0000	0.1230	0.0000
N(G),N(G)-dimethylarginine dimethylaminohydrolase 2	DDAH2	1.4130	0.4604	-0.5107	0.3419	0.7859	0.7702
Dendrin	DDN	-7.5455	-8.8555	-3.5545	0.0000	0.0000	0.0157
Cluster of Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 48 kDa subunit	DDOST	12.0493	7.0473	-1.2899	0.0000	0.0000	0.3984
DDRKG domain-containing protein 1	DDRKG1	8.4711	4.8240	-1.0350	0.0000	0.0014	0.5089
ATP-dependent RNA helicase DDX1	DDX1	0.8232	-0.6012	-1.1513	0.6229	0.7089	0.4582
Cluster of Isoform 4 of Probable ATP-dependent RNA helicase DDX17	DDX17	16.5665	9.6136	-1.8478	0.0000	0.0000	0.2082
Cluster of Isoform 2 of Spliceosome RNA helicase DDX39B	DDX39B	0.8337	-0.7471	-1.3017	0.6182	0.6423	0.3922
Cluster of Isoform 2 of ATP-dependent RNA helicase DDX3X	DDX3X	-0.7151	2.5158	2.9577	0.6802	0.0670	0.0392
Probable ATP-dependent RNA helicase DDX5	DDX5	1.7165	8.4887	7.1662	0.2386	0.0000	0.0000
Probable ATP-dependent RNA helicase DDX6	DDX6	-0.6151	-1.2996	-0.8570	0.7314	0.3714	0.6017
Isoform 2 of 2,4-dienoyl-CoA reductase, mitochondrial	DECR1	-17.0172	1.8347	13.3970	0.0000	0.1902	0.0000
Protein DEK	DEK	7.8724	4.9046	-0.5480	0.0000	0.0013	0.7489
Isoform 2 of DENN domain-containing protein 4C	DENND4C	-1.5299	-1.7841	-0.7095	0.3015	0.2021	0.6631
Deoxyribose-phosphate aldolase	DERA	-8.2658	-0.4052	5.2343	0.0000	0.8095	0.0010
Pre-mRNA-splicing factor ATP-dependent RNA helicase DHX15	DHX15	4.6351	2.9487	-0.2627	0.0018	0.0328	0.8840
ATP-dependent RNA helicase A	DHX9	1.6821	0.5984	-0.5585	0.2490	0.7093	0.7447

Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial	DLAT	-0.9179	2.8327	3.4072	0.5695	0.0405	0.0194
Isoform 2 of Dihydrolipoyl dehydrogenase, mitochondrial	DLD	-0.8233	0.0263	0.5869	0.6229	0.9857	0.7295
Cluster of Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial	DLST	-0.0837	5.7091	5.6632	0.9634	0.0003	0.0005
DnaJ homolog subfamily A member 2	DNAJA2	-0.4322	0.0947	0.3874	0.8111	0.9509	0.8275
Isoform 6 of Dynamin-1-like protein	DNM1L	1.1992	-0.7071	-1.5115	0.4349	0.6575	0.3145
Aspartyl aminopeptidase	DNPEP	1.6527	0.1186	-1.0097	0.2600	0.9410	0.5174
2'-deoxynucleoside 5'-phosphate N-hydrolase 1	DNPH1	-0.3350	-10.4708	10.0539	0.8538	0.0000	0.0000
Dipeptidase 1	DPEP1	-14.7904	-3.7729	6.3730	0.0000	0.0085	0.0002
Isoform 4 of Dipeptidyl peptidase 3	DPP3	-0.9344	-0.4382	0.2064	0.5612	0.7972	0.9038
Dipeptidyl peptidase 4	DPP4	8.6919	5.3026	-0.7155	0.0000	0.0006	0.6617
Isoform DPPX-S of Dipeptidyl aminopeptidase-like protein 6	DPP6	-0.0953	-4.0944	-3.9557	0.9589	0.0049	0.0079
Dihydropyrimidinase	DPYS	-8.4139	-7.2444	-1.3807	0.0000	0.0000	0.3607
Dihydropyrimidinase-related protein 2	DPYSL2	-0.6721	-3.4891	-2.9682	0.7017	0.0131	0.0386
Isoform LCRMP-4 of Dihydropyrimidinase-related protein 3	DPYSL3	-0.4531	-2.3732	-2.0216	0.8004	0.0848	0.1624
Isoform 1B of Desmocollin-1	DSC1	-7.5328	-0.7377	4.4084	0.0000	0.6459	0.0038
Desmoglein-1	DSG1	-1.6214	-0.9094	0.2118	0.2695	0.5533	0.9035
Desmoplakin	DSP	0.7952	-0.7401	-1.2687	0.6378	0.6452	0.4080
Cluster of Dystonin	DST	-0.0292	-0.8471	-0.8119	0.9849	0.5871	0.6229
Isoform 2 of Destrin	DSTN	1.0785	-1.0535	-1.7694	0.4945	0.4813	0.2294
Dual specificity protein phosphatase 3	DUSP3	1.2244	6.0024	5.0599	0.4225	0.0002	0.0013
Cytoplasmic dynein 1 heavy chain 1	DYNC1H1	0.6076	-0.6100	-1.0130	0.7343	0.7076	0.5173
Isoform 2B of Cytoplasmic dynein 1 intermediate chain 2	DYNC1I2	-0.3135	-0.6196	-0.3949	0.8646	0.7041	0.8251
Isoform 2 of Cytoplasmic dynein 1 light intermediate chain 2	DYNC1LI2	-0.3790	1.8730	2.0975	0.8330	0.1800	0.1448
Dynein light chain 1, cytoplasmic	DYNLL1	-0.4646	-11.2538	10.7344	0.7960	0.0000	0.0000
Dynein light chain roadblock-type 1	DYNLRB1	-2.1508	-0.8526	0.6282	0.1287	0.5846	0.7087
Isoform 10 of Dysferlin	DYSF	0.7815	-0.0694	-0.6006	0.6458	0.9607	0.7238
Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial	ECH1	0.5733	0.4789	0.0797	0.7463	0.7782	0.9633
Ethylmalonyl-CoA decarboxylase	ECHDC1	-2.8905	-4.6378	-2.5847	0.0410	0.0019	0.0690

Enoyl-CoA hydratase, mitochondrial	ECHS1	-2.3108	-0.0081	1.5667	0.1020	0.9937	0.2934
Isoform 2 of Enoyl-CoA delta isomerase 1, mitochondrial	ECI1	0.0486	3.4729	3.3772	0.9744	0.0133	0.0201
Isoform 4 of Extracellular matrix protein 1	ECM1	7.1760	4.4143	-0.5548	0.0000	0.0028	0.7458
Enhancer of mRNA-decapping protein 4	EDC4	7.1172	3.6618	-1.2538	0.0000	0.0100	0.4148
Early endosome antigen 1	EEA1	-0.0820	-3.4839	-3.3652	0.9634	0.0131	0.0204
Cluster of Elongation factor 1-alpha 1	EEF1A1	0.1909	-0.2216	-0.3477	0.9202	0.8905	0.8452
Elongation factor 1-beta	EEF1B2	0.2205	-1.7355	-1.8545	0.9046	0.2131	0.2068
Cluster of Isoform 2 of Elongation factor 1-delta	EEF1D	2.3082	0.4099	-1.1702	0.1023	0.8062	0.4506
Isoform 2 of Elongation factor 1-gamma	EEF1G	0.4336	-0.7258	-1.0081	0.8107	0.6504	0.5180
Elongation factor 2	EEF2	2.2862	0.1935	-1.3678	0.1052	0.9040	0.3657
Isoform 2 of EGF-containing fibulin-like extracellular matrix protein 1	EFEMP1	-0.6535	5.8722	6.2116	0.7090	0.0003	0.0002
Cluster of EF-hand domain-containing protein D1	EFHD1	0.4619	1.3102	0.9719	0.7977	0.3684	0.5336
Ephrin-B1	EFNB1	1.3849	10.7678	9.6301	0.3525	0.0000	0.0000
Isoform 2 of 116 kDa U5 small nuclear ribonucleoprotein component	EFTUD2	0.9495	2.2909	1.6026	0.5564	0.0963	0.2814
EH domain-containing protein 2	EHD2	0.9392	2.2101	1.5303	0.5593	0.1090	0.3079
Cluster of EH domain-containing protein 3	EHD3	-1.6388	-1.3044	-0.1642	0.2650	0.3697	0.9236
EH domain-containing protein 4	EHD4	-2.5846	-1.7413	0.0512	0.0672	0.2116	0.9730
Peroxisomal bifunctional enzyme	EHHADH	-12.9141	-2.1185	6.7192	0.0000	0.1236	0.0001
Eukaryotic translation initiation factor 1A, Y-chromosomal	EIF1AY	9.9406	7.9048	0.9890	0.0000	0.0000	0.5262
Isoform 2 of Interferon-induced, double-stranded RNA-activated protein kinase	EIF2AK2	-1.4283	-2.6048	-1.5847	0.3368	0.0585	0.2875
Eukaryotic translation initiation factor 2 subunit 1	EIF2S1	8.0877	5.7904	0.1753	0.0000	0.0003	0.9197
Isoform 2 of Eukaryotic translation initiation factor 3 subunit A	EIF3A	0.0742	3.6135	3.4978	0.9659	0.0108	0.0171
Eukaryotic translation initiation factor 3 subunit I	EIF3I	2.8624	-1.0463	-2.9778	0.0428	0.4847	0.0381
Cluster of Isoform 2 of Eukaryotic initiation factor 4A-II	EIF4A2	2.5823	0.7846	-0.9890	0.0672	0.6214	0.5262
Eukaryotic initiation factor 4A-III	EIF4A3	1.8228	0.0715	-1.1718	0.2076	0.9602	0.4501
Eukaryotic translation initiation factor 4B	EIF4B	-0.3918	2.1760	2.4037	0.8256	0.1147	0.0913
Isoform 7 of Eukaryotic translation initiation factor 4 gamma 1	EIF4G1	1.9968	1.9360	0.5405	0.1633	0.1637	0.7539
Isoform Short of Eukaryotic translation initiation factor 4H	EIF4H	0.2960	-0.1896	-0.3879	0.8710	0.9044	0.8275

Isoform 2 of Eukaryotic translation initiation factor 5A-1	EIF5A	-1.8833	-1.2517	0.0541	0.1913	0.3905	0.9729
Neutrophil elastase	ELANE	8.3978	5.5548	-0.2674	0.0000	0.0004	0.8827
Isoform 2 of ELAV-like protein 1	ELAVL1	3.3553	11.9475	9.4460	0.0184	0.0000	0.0000
Engulfment and cell motility protein 2	ELMO2	-1.1027	-0.2510	0.5049	0.4802	0.8771	0.7716
Emerin	EMD	-1.5522	5.3298	6.2914	0.2939	0.0006	0.0002
Cluster of EMILIN-1	EMILIN1	0.2830	3.3359	3.0830	0.8743	0.0169	0.0318
Isoform 2 of Echinoderm microtubule-associated protein-like 2	EML2	0.6495	-2.1421	-2.5461	0.7111	0.1199	0.0732
Isoform 2 of Echinoderm microtubule-associated protein-like 4	EML4	-0.7031	-4.6909	-4.1273	0.6868	0.0018	0.0060
Endonuclease domain-containing 1 protein	ENDOD1	-0.4477	-0.1634	0.1446	0.8022	0.9155	0.9298
Isoform Short of Endoglin	ENG	-1.7541	-1.6483	-0.4234	0.2256	0.2406	0.8084
Alpha-enolase	ENO1	1.4838	-1.3857	-2.3718	0.3177	0.3332	0.0947
Glutamyl aminopeptidase	ENPEP	-1.6123	-4.6504	-3.4680	0.2718	0.0019	0.0179
Band 4.1-like protein 2	EPB41L2	0.7905	1.7500	1.1798	0.6401	0.2101	0.4488
Cluster of Isoform 3 of Band 4.1-like protein 5	EPB41L5	1.2984	3.0491	2.1094	0.3904	0.0274	0.1424
Epoxide hydrolase 1	EPHX1	-3.2438	4.3371	6.4692	0.0226	0.0032	0.0001
Bifunctional epoxide hydrolase 2	EPHX2	2.2921	1.3931	-0.1938	0.1044	0.3296	0.9094
Isoform 2 of Epsin-1	EPN1	0.7256	-8.7592	-9.0958	0.6759	0.0000	0.0000
Epiplakin	EPPK1	-0.2739	0.3645	0.5446	0.8794	0.8268	0.7511
Bifunctional glutamate/proline--tRNA ligase	EPRS	-0.6848	-0.3359	0.1367	0.6935	0.8399	0.9316
Isoform 2 of Endoplasmic reticulum aminopeptidase 1	ERAP1	2.5672	2.5290	0.7342	0.0685	0.0657	0.6551
Isoform 2 of Endoplasmic reticulum-Golgi intermediate compartment protein 1	ERGIC1	7.3014	3.7199	-1.3223	0.0000	0.0091	0.3849
Endoplasmic reticulum resident protein 29	ERP29	-0.2013	4.2295	4.2904	0.9164	0.0039	0.0046
Endoplasmic reticulum resident protein 44	ERP44	-1.3929	-1.0928	-0.1240	0.3506	0.4656	0.9385
Endothelial cell-selective adhesion molecule	ESAM	-1.4022	-3.3328	-2.3173	0.3466	0.0169	0.1035
S-formylglutathione hydrolase	ESD	0.3306	-2.5519	-2.7312	0.8561	0.0633	0.0560
Isoform 2 of Extended synaptotagmin-1	ESYT1	2.5376	0.6059	-1.1341	0.0713	0.7083	0.4652
Isoform 2 of Electron transfer flavoprotein subunit alpha, mitochondrial	ETFA	-7.0807	-1.2981	3.5500	0.0000	0.3714	0.0157
Isoform 2 of Electron transfer flavoprotein subunit beta	ETFB	-7.2630	0.2558	5.2001	0.0000	0.8753	0.0010
Isoform 2 of Electron transfer flavoprotein-ubiquinone oxidoreductase, mitochondrial	ETFDH	-0.5053	-0.9366	-0.5754	0.7769	0.5409	0.7344
Protein eva-1 homolog B	EVA1B	-2.3607	-4.0688	-2.3870	0.0945	0.0051	0.0931

Cluster of Isoform 3 of RNA-binding protein EWS	EWSR1	0.1275	-1.4470	-1.5077	0.9469	0.3103	0.3152
Exocyst complex component 3-like protein 2	EXOC3L2	-0.5902	-3.7642	-3.2942	0.7395	0.0086	0.0232
Ezrin	EZR	-0.7491	-3.8423	-3.2626	0.6632	0.0075	0.0242
Coagulation factor XII	F12	7.1800	5.0731	0.0894	0.0000	0.0009	0.9590
Prothrombin	F2	1.8782	-0.3378	-1.6115	0.1915	0.8390	0.2785
Coagulation factor IX	F9	2.1709	1.1587	-0.3414	0.1251	0.4314	0.8469
Fatty acid-binding protein, liver	FABP1	-18.1435	-13.6510	-1.0423	0.0000	0.0000	0.5070
Fatty acid-binding protein, adipocyte	FABP4	1.1219	0.0836	-0.6824	0.4705	0.9542	0.6769
Fatty acid-binding protein 5	FABP5	1.9247	8.6403	7.1732	0.1809	0.0000	0.0000
Fumarylacetoacetase	FAH	-2.2674	-1.6503	-0.0756	0.1084	0.2401	0.9633
Isoform D of Constitutive coactivator of PPAR-gamma-like protein 1	FAM120A	-0.6607	-3.7913	-3.2728	0.7050	0.0082	0.0239
Protein FAM98B	FAM98B	2.2574	1.1707	-0.3886	0.1101	0.4266	0.8275
Cluster of FERM, ARHGEF and pleckstrin domain-containing protein 1	FARP1	-4.8561	-0.6187	2.7013	0.0012	0.7041	0.0581
Isoform 2 of Phenylalanine--tRNA ligase alpha subunit	FARSA	-3.6449	1.1373	3.6004	0.0111	0.4427	0.0148
Fatty acid synthase	FASN	-0.5371	0.8106	1.1620	0.7673	0.6058	0.4529
Isoform 3 of Filamin-binding LIM protein 1	FBLIM1	0.2675	0.3545	0.1659	0.8814	0.8324	0.9236
Cluster of Fibulin-1	FBLN1	-1.7898	-0.8645	0.3706	0.2158	0.5785	0.8357
Fibulin-5	FBLN5	-1.6791	2.9810	4.0714	0.2499	0.0311	0.0065
Fibrillin-1	FBN1	1.5836	-0.5692	-1.6380	0.2833	0.7245	0.2711
Fibrillin-2	FBN2	-1.2933	4.7971	5.5918	0.3917	0.0015	0.0005
Fructose-1,6-bisphosphatase 1	FBP1	-7.0298	-8.2100	-3.2720	0.0000	0.0000	0.0239
Cluster of Isoform 3 of Fermitin family homolog 2	FERMT2	0.0131	-3.4162	-3.3636	0.9947	0.0147	0.0204
Isoform 2 of Fermitin family homolog 3	FERMT3	-0.9153	0.7089	1.3198	0.5704	0.6575	0.3853
Isoform 2 of Fibrinogen alpha chain	FGA	-0.6078	-0.7253	-0.2981	0.7343	0.6504	0.8746
Fibrinogen beta chain	FGB	-0.8192	-0.7597	-0.1878	0.6243	0.6351	0.9128
Fibroblast growth factor 1	FGF1	1.5469	-1.1097	-2.1437	0.2960	0.4553	0.1354
Isoform Gamma-A of Fibrinogen gamma chain	FGG	-1.0111	-1.2015	-0.4909	0.5264	0.4121	0.7763
Fibrinogen-like protein 1	FGL1	12.9712	9.6351	0.6231	0.0000	0.0000	0.7114
Fumarate hydratase, mitochondrial	FH	-1.2464	1.7683	2.5857	0.4110	0.2054	0.0690
Cluster of Isoform 5 of Four and a half LIM domains protein 1	FHL1	2.3842	-1.4981	-3.0957	0.0911	0.2918	0.0312
Four and a half LIM domains protein 2	FHL2	0.8743	-1.4326	-2.0025	0.5961	0.3149	0.1670
Four and a half LIM domains protein 3	FHL3	3.8582	-2.6406	-5.2219	0.0075	0.0557	0.0010
Mitochondrial fission 1 protein	FIS1	0.6346	-8.7825	-9.0567	0.7183	0.0000	0.0000

Peptidyl-prolyl cis-trans isomerase FKBP1A	FKBP1A	-1.8110	-1.5500	-0.2881	0.2109	0.2709	0.8795
Peptidyl-prolyl cis-trans isomerase FKBP2	FKBP2	-0.8972	-0.8422	-0.2157	0.5819	0.5897	0.9016
Cluster of Peptidyl-prolyl cis-trans isomerase FKBP3	FKBP3	3.6275	-1.4520	-3.8976	0.0114	0.3098	0.0087
Peptidyl-prolyl cis-trans isomerase FKBP5	FKBP5	-1.3916	2.3170	3.2235	0.3506	0.0920	0.0258
Filaggrin-2	FLG2	-3.5117	-1.3351	1.0818	0.0138	0.3566	0.4898
Isoform 2 of Filamin-A	FLNA	0.2837	-0.1906	-0.3805	0.8743	0.9043	0.8304
Isoform 8 of Filamin-B	FLNB	2.2443	1.1861	-0.3645	0.1127	0.4198	0.8384
Isoform 2 of Filamin-C	FLNC	2.8793	-1.1846	-3.1252	0.0418	0.4198	0.0300
Isoform 2 of Flotillin-1	FLOT1	-0.5939	-1.0125	-0.5895	0.7388	0.5041	0.7284
Flotillin-2	FLOT2	-3.7450	-1.7617	0.8219	0.0092	0.2072	0.6188
Cluster of Vascular endothelial growth factor receptor 1	FLT1	-2.7641	-4.1377	-2.1797	0.0502	0.0045	0.1284
Isoform 17 of Fibronectin	FN1	-0.2635	0.3192	0.4929	0.8834	0.8457	0.7755
Fascin	FSCN1	-0.1739	-2.8824	-2.7120	0.9286	0.0370	0.0575
Isoform C of Formimidoyltransferase-cyclodeaminase	FTCD	-6.3733	-1.7721	2.6025	0.0001	0.2046	0.0677
Ferritin light chain	FTL	-4.4388	0.1872	3.2084	0.0026	0.9044	0.0263
Alpha-ketoglutarate-dependent dioxygenase FTO	FTO	-1.0204	-0.4263	0.2766	0.5238	0.7991	0.8827
Isoform 2 of Far upstream element-binding protein 1	FUBP1	1.3896	-1.4339	-2.3549	0.3508	0.3149	0.0976
Isoform Short of RNA-binding protein FUS	FUS	0.7990	-1.8028	-2.3148	0.6356	0.1976	0.1038
Ras GTPase-activating protein-binding protein 1	G3BP1	1.6517	3.6988	2.5067	0.2600	0.0094	0.0775
Lysosomal alpha-glucosidase	GAA	-0.8986	2.3686	2.9382	0.5814	0.0853	0.0401
Aldose 1-epimerase	GALM	-3.1937	-2.6767	-0.4523	0.0243	0.0525	0.7914
Neutral alpha-glucosidase AB	GANAB	-0.0053	-1.0729	-1.0500	0.9987	0.4738	0.5043
Cluster of Isoform 2 of Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	0.1739	-2.6354	-2.7064	0.9286	0.0559	0.0578
Glycine--tRNA ligase	GARS1	3.2138	0.2784	-1.9164	0.0236	0.8640	0.1900
Growth arrest-specific protein 2	GAS2	1.9357	-2.7590	-4.0282	0.1779	0.0457	0.0070
Isoform 2 of Glycine amidinotransferase, mitochondrial	GATM	-1.3110	-1.5125	-0.5920	0.3844	0.2861	0.7284
1,4-alpha-glucan-branching enzyme	GBE1	1.0640	-0.2107	-0.9319	0.5027	0.8954	0.5553
Guanylate-binding protein 1	GBP1	6.9955	3.6677	-1.1651	0.0000	0.0100	0.4526
Isoform 3 of Vitamin D-binding protein	GC	-0.3030	-3.5400	-3.2698	0.8704	0.0121	0.0239
eIF-2-alpha kinase activator GCN1	GCN1	0.8469	-0.6181	-1.1840	0.6097	0.7041	0.4470
Isoform 2 of Guanine deaminase	GDA	-0.4569	-0.4200	-0.1011	0.7998	0.7997	0.9542
Rab GDP dissociation inhibitor alpha	GDI1	-0.7430	-3.4428	-2.8744	0.6676	0.0141	0.0438

Rab GDP dissociation inhibitor beta	GDI2	0.7781	-2.0811	-2.5737	0.6478	0.1294	0.0701
Gamma-glutamylcyclotransferase	GGCT	-9.4588	0.3892	6.8273	0.0000	0.8182	0.0001
GTPase IMAP family member 4	GIMAP4	-5.4695	-0.3036	3.4287	0.0004	0.8527	0.0189
GTPase IMAP family member 8	GIMAP8	-3.1307	-1.8410	0.3253	0.0272	0.1883	0.8578
Isoform 3 of ARF GTPase-activating protein GIT1	GIT1	0.7678	1.9391	1.3810	0.6530	0.1630	0.3607
Gap junction alpha-5 protein	GJA5	0.0605	-7.2598	-7.1702	0.9698	0.0000	0.0000
Isoform 2 of Golgi apparatus protein 1	GLG1	-1.4719	-0.9443	0.0756	0.3220	0.5377	0.9633
Isoform 2 of Lactoylglutathione lyase	GLO1	-1.4228	-1.0085	-0.0209	0.3384	0.5052	0.9892
Glutaredoxin-1	GLRX	0.4240	-11.9948	12.0676	0.8141	0.0000	0.0000
Isoform 3 of Glutaminase kidney isoform, mitochondrial	GLS	-0.8598	2.6743	3.2120	0.6032	0.0526	0.0262
Cluster of Glutamate dehydrogenase 1, mitochondrial	GLUD1	-0.3005	-0.9024	-0.6814	0.8710	0.5568	0.6769
GDP-mannose 4,6 dehydratase	GMDS	-0.5614	-3.5079	-3.0621	0.7504	0.0128	0.0328
Glia maturation factor beta	GMFB	-14.8455	-9.5348	0.7525	0.0000	0.0000	0.6453
Cluster of Guanine nucleotide-binding protein subunit alpha-11	GNA11	0.5348	0.0107	-0.3540	0.7673	0.9923	0.8432
Cluster of Guanine nucleotide-binding protein G(i) subunit alpha-2	GNAI2	-1.2963	-1.6851	-0.7715	0.3909	0.2280	0.6393
Isoform Alpha-2 of Guanine nucleotide-binding protein G(o) subunit alpha	GNAO1	16.3511	9.5377	-1.7756	0.0000	0.0000	0.2281
Guanine nucleotide-binding protein G(q) subunit alpha	GNAQ	-3.1054	-3.4946	-1.3157	0.0285	0.0130	0.3870
Isoform XLas-2 of Guanine nucleotide-binding protein G(s) subunit alpha isoforms XLas	GNAS	-0.1908	-1.3159	-1.1622	0.9202	0.3662	0.4529
Guanine nucleotide-binding protein G(l)/G(s)/G(t) subunit beta-1	GNB1	0.6364	-0.5782	-1.0014	0.7174	0.7196	0.5203
Cluster of Guanine nucleotide-binding protein G(l)/G(s)/G(t) subunit beta-2	GNB2	0.4095	-2.0816	-2.3232	0.8205	0.1294	0.1025
Guanine nucleotide-binding protein G(l)/G(s)/G(o) subunit gamma-12	GNG12	-0.6471	-10.7874	10.1521	0.7119	0.0000	0.0000
Isoform 2 of Guanine nucleotide-binding protein-like 1	GNL1	-1.2649	0.2082	1.0664	0.4036	0.8954	0.4956
Cluster of Glucosamine-6-phosphate isomerase 1	GNPDA1	0.0488	-8.7364	-8.6123	0.9744	0.0000	0.0000
Isoform 3 of Golgi reassembly-stacking protein 2	GORASP2	1.0541	-1.9610	-2.6439	0.5074	0.1576	0.0634
Isoform 2 of Aspartate aminotransferase, cytoplasmic	GOT1	-2.1745	-2.2501	-0.7278	0.1245	0.1021	0.6567
Aspartate aminotransferase, mitochondrial	GOT2	0.0000	4.3848	4.3058	1.0000	0.0030	0.0045

Glycerol-3-phosphate dehydrogenase [NAD(+)], cytoplasmic	GPD1	0.4001	1.8092	1.5040	0.8234	0.1960	0.3157
Isoform 2 of Gephyrin	GPHN	-0.3872	-4.6078	-4.2609	0.8274	0.0020	0.0048
Glucose-6-phosphate isomerase	GPI	1.5188	-1.6167	-2.6225	0.3049	0.2497	0.0655
Isoform 2 of Transmembrane glycoprotein NMB	GPNMB	1.2561	1.9048	1.0146	0.4058	0.1711	0.5173
Glutathione peroxidase 1	GPX1	-4.6776	2.5783	5.7191	0.0017	0.0609	0.0004
Glutathione peroxidase 3	GPX3	-2.6276	-3.1507	-1.3035	0.0627	0.0230	0.3922
Growth factor receptor-bound protein 2	GRB2	-4.9071	0.1407	3.4818	0.0011	0.9270	0.0176
Glyoxylate reductase/hydroxypyruvate reductase	GRHPR	1.8516	-3.1730	-4.3774	0.1988	0.0222	0.0040
Glycogen synthase kinase-3 beta	GSK3B	-1.2652	0.2513	1.1089	0.4036	0.8771	0.4765
Isoform 2 of Gelsolin	GSN	-0.6655	-3.6400	-3.1210	0.7032	0.0104	0.0301
Glutathione reductase, mitochondrial	GSR	-7.4162	-7.7204	-2.5280	0.0000	0.0000	0.0748
Glutathione synthetase	GSS	-1.1737	-1.5506	-0.7229	0.4456	0.2709	0.6591
Isoform 4 of Glutathione S-transferase kappa 1	GSTK1	-13.7316	-1.5762	7.8087	0.0000	0.2624	0.0000
Glutathione S-transferase Mu 3	GSTM3	-3.1266	-0.7388	1.4049	0.0274	0.6456	0.3533
Glutathione S-transferase omega-1	GSTO1	-0.5244	5.1046	5.3699	0.7697	0.0009	0.0008
Glutathione S-transferase P	GSTP1	1.2599	-2.2847	-3.1019	0.4057	0.0970	0.0310
Glutathione S-transferase theta-1	GSTT1	-4.6489	-3.5008	-0.2700	0.0018	0.0129	0.8827
Isoform 2 of General transcription factor II-I	GTF2I	0.6097	-0.3648	-0.7736	0.7343	0.8268	0.6387
Isoform 2 of Histone H1.0	H1-0	-0.0678	1.0108	1.0388	0.9677	0.5042	0.5073
Cluster of Histone H1.4	H1-4	0.3935	-1.6701	-1.9081	0.8252	0.2330	0.1921
Histone H1.5	H1-5	1.8785	1.5957	0.2870	0.1915	0.2566	0.8797
Histone H1x	H1FX	-0.1955	-1.8187	-1.6527	0.9192	0.1938	0.2649
Histone H2A.V	H2AFV	0.5679	-0.1658	-0.5498	0.7490	0.9144	0.7487
Isoform 1 of Core histone macro-H2A.1	H2AFY	0.5174	-1.0709	-1.4042	0.7734	0.4739	0.3533
Core histone macro-H2A.2	H2AFY2	1.3102	-0.9376	-1.8135	0.3844	0.5409	0.2188
Cluster of Histone H2B type 1-M	H2BC14	13.0643	8.5443	-0.5114	0.0000	0.0000	0.7702
Cluster of Histone H3.3	H3-3A	1.4850	1.2625	0.2279	0.3177	0.3862	0.8970
Histone H4	H4C1	2.0623	0.0709	-1.3356	0.1478	0.9602	0.3798
Cluster of 3-hydroxyanthranilate 3,4-dioxygenase	HAAO	2.7650	0.4275	-1.4643	0.0502	0.7991	0.3299
Isoform 2 of Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	HADH	-6.0081	-4.1532	0.0154	0.0002	0.0044	0.9917
Trifunctional enzyme subunit alpha, mitochondrial	HADHA	0.6951	1.6227	1.1198	0.6882	0.2489	0.4728
Trifunctional enzyme subunit beta, mitochondrial	HADHB	0.2511	1.8229	1.6190	0.8898	0.1938	0.2771

Isoform 2 of Hydroxyacylglutathione hydrolase, mitochondrial	HAGH	-0.8017	-4.7270	-4.0955	0.6345	0.0017	0.0063
Isoform 2 of Histidine--tRNA ligase, cytoplasmic	HARS	-2.8511	-0.6953	1.2599	0.0437	0.6632	0.4117
Hemoglobin subunit alpha	HBA1	-1.7807	-4.3879	-3.0955	0.2182	0.0029	0.0312
Hemoglobin subunit beta	HBB	-1.4477	-3.9615	-2.9037	0.3299	0.0061	0.0421
Hemoglobin subunit delta	HBD	-1.7165	-3.7180	-2.4813	0.2386	0.0091	0.0804
Hemoglobin subunit gamma-1	HBG1	-14.1692	-6.9054	2.8737	0.0000	0.0001	0.0438
Isoform 6 of Histone deacetylase 7	HDAC7	0.1170	0.5243	0.4351	0.9493	0.7508	0.8032
Isoform 2 of Hepatoma-derived growth factor-related protein 2	HDGFL2	1.5630	0.3511	-0.7203	0.2896	0.8337	0.6600
Vigilin	HDLBP	2.3447	1.2587	-0.3616	0.0969	0.3872	0.8395
Heme-binding protein 1	HEBP1	-0.5641	-8.1750	-7.6434	0.7504	0.0000	0.0000
Heme-binding protein 2	HEBP2	-13.9018	-0.7069	8.7783	0.0000	0.6575	0.0000
3-hydroxyisobutyrate dehydrogenase, mitochondrial	HIBADH	-8.5979	-0.2749	5.5886	0.0000	0.8656	0.0005
Histidine triad nucleotide-binding protein 2, mitochondrial	HINT2	-0.1653	-8.5169	-8.2508	0.9318	0.0000	0.0000
Cluster of Histone H2A type 1-A	HIST1H2AA	0.2954	-0.7084	-0.8969	0.8710	0.6575	0.5766
Putative histone H2B type 2-C	HIST2H2BC	0.4503	8.2682	7.8124	0.8013	0.0000	0.0000
Isoform 2 of Hexokinase-1	HK1	-0.8296	1.2679	1.8103	0.6204	0.3841	0.2196
Cluster of Isoform 2 of HLA class I histocompatibility antigen, A alpha chain	HLA-A	-1.8028	-2.7597	-1.4816	0.2130	0.0457	0.3243
HLA class I histocompatibility antigen, B alpha chain	HLA-B	-2.4029	-1.3937	0.2688	0.0887	0.3296	0.8827
Cluster of HLA class II histocompatibility antigen, DR alpha chain	HLA-DRA	-3.5094	-4.0651	-1.6005	0.0138	0.0051	0.2820
Cluster of HLA class II histocompatibility antigen, DRB1-8 beta chain	HLA-DRB1	-1.4152	16.9294	17.5886	0.3419	0.0000	0.0000
Cluster of HLA class II histocompatibility antigen, DRB1-13 beta chain	HLA-DRB1	-12.8701	-0.8099	7.9742	0.0000	0.6058	0.0000
HLA class II histocompatibility antigen, DRB1-4 beta chain	HLA-DRB1	-9.9538	-7.7131	-0.7917	0.0000	0.0000	0.6305
Cluster of HLA class II histocompatibility antigen, DRB1-7 beta chain	HLA-DRB1	-2.4724	7.5200	9.0692	0.0793	0.0000	0.0000
HLA class I histocompatibility antigen, alpha chain E	HLA-E	17.7177	11.1080	-1.1647	0.0000	0.0000	0.4526
Cluster of High mobility group protein B1	HMGB1	1.1853	-0.3495	-1.1509	0.4400	0.8337	0.4582
High mobility group protein B2	HMGB2	15.5830	10.1090	-0.6912	0.0000	0.0000	0.6726
Isoform 2 of Hydroxymethylglutaryl-CoA synthase, mitochondrial	HMGCS2	-8.0596	-0.2358	5.2601	0.0000	0.8850	0.0009
Histamine N-methyltransferase	HNMT	3.0002	1.4893	-0.5818	0.0339	0.2953	0.7311

Heterogeneous nuclear ribonucleoprotein A0	HNRNPA0	-0.6998	4.9394	5.3273	0.6868	0.0012	0.0008
Isoform A1-A of Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	0.6855	0.3393	-0.1339	0.6935	0.8384	0.9325
Heterogeneous nuclear ribonucleoproteins A2/B1	HNRNPA2B1	1.8869	0.0452	-1.2413	0.1904	0.9743	0.4209
Isoform 2 of Heterogeneous nuclear ribonucleoprotein A3	HNRNPA3	-0.7923	1.1815	1.7001	0.6395	0.4208	0.2511
Isoform 2 of Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	-4.0431	-0.7359	2.0323	0.0053	0.6467	0.1598
Cluster of Isoform C1 of Heterogeneous nuclear ribonucleoproteins C1/C2	HNRNPC	0.9766	0.3260	-0.3454	0.5426	0.8443	0.8452
Isoform 2 of Heterogeneous nuclear ribonucleoprotein D0	HNRNPD	1.7777	-0.2155	-1.4229	0.2184	0.8935	0.3471
Heterogeneous nuclear ribonucleoprotein D-like	HNRNPDL	-4.5771	-3.4907	-0.3091	0.0020	0.0131	0.8681
Heterogeneous nuclear ribonucleoprotein F	HNRNPF	1.1213	1.0651	0.2819	0.4705	0.4755	0.8827
Cluster of Heterogeneous nuclear ribonucleoprotein H	HNRNPH1	2.2222	0.3197	-1.2003	0.1168	0.8457	0.4377
Isoform 2 of Heterogeneous nuclear ribonucleoprotein H3	HNRNPH3	0.7120	-0.3626	-0.8413	0.6821	0.8277	0.6084
Isoform 2 of Heterogeneous nuclear ribonucleoprotein K	HNRNPK	1.7355	-1.2233	-2.3838	0.2323	0.4015	0.0931
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	1.5699	0.6044	-0.4761	0.2882	0.7088	0.7812
Isoform 2 of Heterogeneous nuclear ribonucleoprotein M	HNRNPM	2.0173	0.3525	-1.0284	0.1584	0.8334	0.5114
Cluster of Isoform 2 of Heterogeneous nuclear ribonucleoprotein R	HNRNPR	1.5264	8.4997	7.3065	0.3024	0.0000	0.0000
Heterogeneous nuclear ribonucleoprotein U	HNRNPU	1.7978	-0.5919	-1.8063	0.2140	0.7134	0.2208
Isoform 2 of Heterogeneous nuclear ribonucleoprotein U-like protein 1	HNRNPUL1	-0.4130	-0.8975	-0.5999	0.8201	0.5584	0.7238
Heterogeneous nuclear ribonucleoprotein U-like protein 2	HNRNPUL2	1.1606	-2.4302	-3.1772	0.4516	0.0776	0.0277
Cluster of Isoform 2 of Haptoglobin	HP	1.0176	-0.0912	-0.7830	0.5246	0.9509	0.6349
Heterochromatin protein 1-binding protein 3	HP1BP3	0.5856	0.3657	-0.0399	0.7408	0.8268	0.9789
Cluster of Isoform 5 of 15-hydroxyprostaglandin dehydrogenase [NAD(+)]	HPGD	-0.3190	-10.6764	10.2666	0.8624	0.0000	0.0000
Hemopexin	HPX	1.7093	-1.0366	-2.1826	0.2401	0.4901	0.1283
Histidine-rich glycoprotein	HRG	-0.4820	-1.1464	-0.7973	0.7863	0.4383	0.6296
Hornerin	HRNR	-1.3744	-1.4767	-0.5137	0.3575	0.3003	0.7702
HCLS1-binding protein 3	HS1BP3	1.8170	-0.1871	-1.4218	0.2090	0.9044	0.3471
3-hydroxyacyl-CoA dehydrogenase type-2	HSD17B10	0.9511	-0.2912	-0.9340	0.5558	0.8588	0.5548

Very-long-chain 3-oxoacyl-CoA reductase	HSD17B12	5.1993	-0.9706	-4.4959	0.0007	0.5241	0.0033
Peroxisomal multifunctional enzyme type 2	HSD17B4	-0.0882	-0.6628	-0.5908	0.9625	0.6814	0.7284
Cluster of Isoform 2 of Heat shock protein HSP 90-alpha	HSP90AA1	1.4626	-0.6414	-1.6265	0.3256	0.6919	0.2744
Endoplasmic reticulum chaperone BiP	HSP90B1	2.1793	-0.4281	-1.9053	0.1236	0.7991	0.1924
Heat shock 70 kDa protein 12A	HSPA12A	-1.5644	-1.4744	-0.3819	0.2896	0.3011	0.8299
Heat shock 70 kDa protein 12B	HSPA12B	-2.1899	-2.2948	-0.7613	0.1216	0.0958	0.6422
Cluster of Heat shock 70 kDa protein 1B	HSPA1B	-0.8413	-1.7156	-1.1114	0.6135	0.2194	0.4758
Heat shock 70 kDa protein 4	HSPA4	0.9119	0.4688	-0.1611	0.5723	0.7808	0.9236
Endoplasmic reticulum chaperone BiP	HSPA5	0.9426	-1.2392	-1.8591	0.5588	0.3957	0.2058
Cluster of Heat shock cognate 71 kDa protein	HSPA8	0.3683	-0.3932	-0.6371	0.8387	0.8169	0.7047
Stress-70 protein, mitochondrial	HSPA9	0.1304	1.0070	0.8999	0.9459	0.5054	0.5748
Heat shock protein beta-1	HSPB1	0.3591	0.4162	0.1641	0.8444	0.8015	0.9236
60 kDa heat shock protein, mitochondrial	HSPD1	0.5520	-1.6975	-2.0430	0.7578	0.2248	0.1578
10 kDa heat shock protein, mitochondrial	HSPE1	0.9749	-1.5613	-2.1974	0.5432	0.2672	0.1258
Basement membrane-specific heparan sulfate proteoglycan core protein	HSPG2	0.6977	0.0513	-0.4250	0.6868	0.9715	0.8077
Serine protease HTRA1	HTRA1	-5.9204	-0.9225	3.1283	0.0002	0.5484	0.0299
Isoform 2 of E3 ubiquitin-protein ligase HUWE1	HUWE1	0.1150	-0.4301	-0.5007	0.9493	0.7991	0.7734
Hypoxia up-regulated protein 1	HYOU1	-0.3901	-2.5547	-2.2428	0.8264	0.0632	0.1172
Isoamyl acetate-hydrolyzing esterase 1 homolog	IAH1	-7.2894	-1.4610	3.5322	0.0000	0.3066	0.0162
Isoleucine--tRNA ligase, mitochondrial	IARS2	-0.5657	0.1769	0.5592	0.7502	0.9107	0.7447
Intercellular adhesion molecule 1	ICAM1	-0.6541	-1.4514	-0.9796	0.7090	0.3098	0.5308
Isocitrate dehydrogenase [NADP] cytoplasmic	IDH1	3.7773	1.0052	-1.5868	0.0087	0.5059	0.2869
Isocitrate dehydrogenase [NADP], mitochondrial	IDH2	2.8415	4.1946	2.1828	0.0444	0.0041	0.1283
Interferon-induced protein 44-like	IFI44L	8.9438	5.7018	-0.4952	0.0000	0.0003	0.7747
Isoform 2 of Interferon-induced protein with tetratricopeptide repeats 1	IFIT1	6.6155	3.8177	-0.7588	0.0001	0.0078	0.6422
Isoform 2 of Insulin-like growth factor-binding protein complex acid labile subunit	IGFALS	1.6891	-0.0902	-1.2395	0.2471	0.9509	0.4209
Isoform 2 of Insulin-like growth factor-binding protein 7	IGFBP7	8.6395	5.7731	-0.2178	0.0000	0.0003	0.9013
Cluster of Immunoglobulin heavy constant alpha 1	IGHA1	-0.4365	-1.0109	-0.6953	0.8090	0.5042	0.6718
Isoform 2 of Immunoglobulin heavy constant delta	IGHD	12.8926	1.3127	-7.4957	0.0000	0.3676	0.0000

Immunoglobulin heavy constant gamma 1	IGHG1	0.2686	-1.0124	-1.1772	0.8812	0.5041	0.4488
Immunoglobulin heavy constant gamma 2	IGHG2	1.6525	-0.1537	-1.2770	0.2600	0.9199	0.4039
Immunoglobulin heavy constant gamma 3	IGHG3	0.2925	-0.6783	-0.8654	0.8710	0.6724	0.5978
Immunoglobulin heavy constant gamma 4	IGHG4	4.4820	-0.4248	-3.4711	0.0024	0.7997	0.0178
Immunoglobulin heavy constant mu	IGHM	2.9442	0.0915	-1.9163	0.0372	0.9509	0.1900
Cluster of Immunoglobulin heavy variable 1-18	IGHV1-18	-0.6649	-12.8953	12.2099	0.7032	0.0000	0.0000
Immunoglobulin heavy variable 3-66	IGHV3-66	1.9654	-0.3197	-1.6531	0.1712	0.8457	0.2649
Immunoglobulin heavy variable 3-72	IGHV3-72	-14.1732	-1.4329	8.2504	0.0000	0.3149	0.0000
Immunoglobulin heavy variable 3-9	IGHV3-9	-9.6273	-6.5859	0.0927	0.0000	0.0001	0.9574
Immunoglobulin kappa constant	IGKC	0.8204	-1.0863	-1.6257	0.6243	0.4684	0.2744
Cluster of Immunoglobulin kappa variable 2-28	IGKV2-28	5.3546	-2.1755	-5.7849	0.0005	0.1147	0.0004
Immunoglobulin kappa variable 3-11	IGKV3-11	2.4635	1.3363	-0.3664	0.0802	0.3564	0.8382
Immunoglobulin kappa variable 3-15	IGKV3-15	9.2811	-3.3036	-9.5681	0.0000	0.0178	0.0000
Cluster of Immunoglobulin kappa variable 3-20	IGKV3-20	1.1274	-0.0240	-0.7917	0.4693	0.9861	0.6305
Cluster of Immunoglobulin lambda-like polypeptide 5	IGLL5	-0.1082	-1.2192	-1.1235	0.9526	0.4035	0.4717
Immunoglobulin lambda variable 1-47	IGLV1-47	0.0144	4.7237	4.6288	0.9943	0.0017	0.0026
Immunoglobulin superfamily member 8	IGSF8	-12.4505	-1.2613	7.2451	0.0000	0.3862	0.0000
Interleukin enhancer-binding factor 2	ILF2	1.3024	-1.8736	-2.7272	0.3887	0.1800	0.0563
Isoform 7 of Interleukin enhancer-binding factor 3	ILF3	5.2008	-0.7165	-4.2473	0.0007	0.6542	0.0049
Cluster of Isoform 2 of Integrin-linked protein kinase	ILK	1.2781	-0.6030	-1.4630	0.3988	0.7088	0.3301
Isoform 4 of MIC complex subunit MIC60	IMMT	0.9859	0.0429	-0.6296	0.5387	0.9754	0.7082
Inverted formin-2	INF2	-1.5903	-0.5677	0.5262	0.2805	0.7246	0.7627
Inhibin beta E chain	INHBE	-16.4546	0.1491	11.3583	0.0000	0.9223	0.0000
Isoform 2 of Importin-5	IPO5	2.5658	1.2740	-0.4973	0.0685	0.3819	0.7743
Importin-9	IPO9	-0.7507	-1.5564	-1.0168	0.6626	0.2687	0.5163
Ras GTPase-activating-like protein IQGAP1	IQGAP1	2.5915	1.0914	-0.6941	0.0665	0.4660	0.6718
Ras GTPase-activating-like protein IQGAP2	IQGAP2	-2.1944	-3.4163	-1.8595	0.1211	0.0147	0.2058
Ubiquitin-like protein ISG15	ISG15	16.7299	10.4144	-1.1728	0.0000	0.0000	0.4501
Isochorismatase domain-containing protein 2	ISOC2	-5.0430	-3.5594	-0.0591	0.0009	0.0118	0.9696
Isoform 2 of IST1 homolog	IST1	4.0803	2.8564	0.0247	0.0050	0.0389	0.9870

Inositol-3-phosphate synthase 1	ISYNA1	2.3462	2.1163	0.4795	0.0968	0.1236	0.7812
E3 ubiquitin-protein ligase Itchy homolog	ITCH	-0.3530	-0.8992	-0.6425	0.8482	0.5581	0.7021
Integrin alpha-1	ITGA1	1.1813	-0.8654	-1.6547	0.4410	0.5784	0.2648
Cluster of Integrin alpha-3	ITGA3	-0.7663	-3.7357	-3.1463	0.6530	0.0089	0.0289
Isoform Alpha-6X1B of Integrin alpha-6	ITGA6	2.7563	1.1219	-0.7765	0.0508	0.4493	0.6381
Integrin alpha-8	ITGA8	-0.1795	0.7404	0.8494	0.9267	0.6452	0.6051
Isoform 3 of Integrin alpha-V	ITGAV	-0.9487	-1.7560	-1.0779	0.5564	0.2090	0.4902
Integrin beta-1	ITGB1	-1.7396	-4.9173	-3.6434	0.2309	0.0012	0.0137
Cluster of Integrin beta-3	ITGB3	0.4522	0.6826	0.3622	0.8004	0.6709	0.8395
Integrin beta-5	ITGB5	1.2311	-2.0892	-2.8904	0.4192	0.1282	0.0427
Inter-alpha-trypsin inhibitor heavy chain H1	ITIH1	2.7568	1.1851	-0.7147	0.0508	0.4198	0.6617
Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	0.1183	1.6177	1.5079	0.9493	0.2497	0.3152
Cluster of Isoform 2 of Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	-3.5376	-0.9878	1.4405	0.0132	0.5144	0.3391
Cluster of Inter-alpha-trypsin inhibitor heavy chain H5	ITIH5	1.0178	-1.9466	-2.6051	0.5246	0.1611	0.0677
Integral membrane protein 2B	ITM2B	-2.5461	-4.1552	-2.3455	0.0704	0.0044	0.0990
Isoform 2 of Inosine triphosphate pyrophosphatase	ITPA	7.5581	4.2055	-1.0203	0.0000	0.0040	0.5155
Junctional protein associated with coronary artery disease	JCAD	0.9106	-1.1880	-1.7871	0.5727	0.4196	0.2254
Junction plakoglobin	JUP	0.5296	1.3386	0.9536	0.7673	0.3555	0.5431
Cluster of KN motif and ankyrin repeat domain-containing protein 2	KANK2	-2.2695	-2.6207	-1.0270	0.1082	0.0570	0.5118
Isoform 2 of KN motif and ankyrin repeat domain-containing protein 3	KANK3	0.2588	-2.0722	-2.2112	0.8859	0.1311	0.1235
Lysine--tRNA ligase	KARS1	-0.6117	-0.0151	0.4020	0.7337	0.9903	0.8208
Kelch repeat and BTB domain-containing protein 11	KBTBD11	-4.5833	-1.1881	1.9563	0.0020	0.4196	0.1798
BTB/POZ domain-containing protein KCTD12	KCTD12	-1.9061	-2.1967	-0.8583	0.1861	0.1116	0.6017
Isoform 2 of KH domain-containing, RNA-binding, signal transduction-associated protein 1	KHDRBS1	-0.4787	-3.4827	-3.0938	0.7866	0.0131	0.0312
Isoform A of Ketohexokinase	KHK	-3.4401	-1.4490	0.9211	0.0157	0.3103	0.5616
Far upstream element-binding protein 2	KHSRP	2.0416	-0.4919	-1.8742	0.1525	0.7693	0.2018
Kinesin-1 heavy chain	KIF5B	-0.0967	-1.4817	-1.3891	0.9585	0.2987	0.3588
Isoform 2 of Kin of IRRE-like protein 1	KIRREL1	-1.0525	-6.7719	-5.9327	0.5079	0.0001	0.0003
Kininogen-1	KNG1	3.5564	2.3959	-0.0705	0.0129	0.0816	0.9647
Importin subunit beta-1	KPNB1	1.9843	0.4470	-0.9132	0.1659	0.7925	0.5671
Keratinocyte proline-rich protein	KPRP	-1.8426	-0.5852	0.6809	0.2017	0.7177	0.6769
Keratin, type II cytoskeletal 1	KRT1	-0.2491	0.3880	0.5508	0.8898	0.8185	0.7486

Keratin, type I cytoskeletal 10	KRT10	-0.7216	0.0323	0.5234	0.6767	0.9822	0.7637
Cluster of Keratin, type I cytoskeletal 14	KRT14	0.1070	0.7107	0.6249	0.9529	0.6575	0.7108
Keratin, type I cytoskeletal 18	KRT18	-0.4941	3.6309	3.9021	0.7785	0.0105	0.0086
Cluster of Keratin, type II cytoskeletal 2 epidermal	KRT2	-0.8705	-0.0892	0.5056	0.5979	0.9509	0.7716
Keratin, type I cytoskeletal 27	KRT27	0.7880	4.9941	4.3672	0.6411	0.0011	0.0040
Cluster of Keratin, type I cuticular Ha1	KRT31	14.5973	12.0663	1.9025	0.0000	0.0000	0.1931
Keratin, type I cuticular Ha4	KRT34	15.7543	19.7234	8.6332	0.0000	0.0000	0.0000
Keratin, type I cuticular Ha6	KRT36	23.3934	14.5084	-1.6929	0.0000	0.0000	0.2532
Keratin, type II cytoskeletal 4	KRT4	0.3050	1.5382	1.3026	0.8694	0.2755	0.3922
Cluster of Keratin, type II cytoskeletal 71	KRT71	1.1240	4.0614	3.2223	0.4705	0.0051	0.0258
Keratin, type II cytoskeletal 1b	KRT77	-1.1207	15.5805	16.0633	0.4705	0.0000	0.0000
Keratin, type II cytoskeletal 78	KRT78	-0.1111	-0.5625	-0.4767	0.9517	0.7281	0.7812
Cluster of Isoform 2 of Keratin, type II cytoskeletal 8	KRT8	-0.2275	9.7466	9.7260	0.9009	0.0000	0.0000
Isoform 2 of Keratin, type II cytoskeletal 80	KRT80	-6.3298	-0.3828	3.9372	0.0001	0.8208	0.0081
Cluster of Keratin, type II cuticular Hb5	KRT85	12.7272	9.8921	1.0417	0.0000	0.0000	0.5070
Keratin, type I cytoskeletal 9	KRT9	0.0029	0.5839	0.5713	0.9997	0.7182	0.7372
Keratin-associated protein 13-1	KRTAP13-1	25.8063	16.4066	-1.4730	0.0000	0.0000	0.3265
Keratin-associated protein 13-2	KRTAP13-2	23.5866	16.5373	0.1678	0.0000	0.0000	0.9236
Keratin-associated protein 13-4	KRTAP13-4	24.9529	17.0044	-0.3046	0.0000	0.0000	0.8712
Keratin-associated protein 3-3	KRTAP3-3	30.8954	23.1512	1.6823	0.0000	0.0000	0.2552
Isoform 2 of Kinectin	KTN1	2.0289	0.6296	-0.7642	0.1553	0.6991	0.6422
Laminin subunit alpha-2	LAMA2	0.2724	1.2101	1.0027	0.8794	0.4077	0.5203
Cluster of Laminin subunit alpha-3	LAMA3	3.6474	2.5174	-0.0133	0.0111	0.0669	0.9917
Isoform 2 of Laminin subunit alpha-4	LAMA4	-1.1593	-1.2681	-0.4553	0.4519	0.3841	0.7900
Laminin subunit alpha-5	LAMA5	1.4538	-0.3257	-1.3104	0.3284	0.8443	0.3889
Laminin subunit beta-1	LAMB1	3.4717	2.7359	0.3211	0.0148	0.0473	0.8602
Laminin subunit beta-2	LAMB2	2.0334	0.3035	-1.0875	0.1545	0.8527	0.4869
Laminin subunit gamma-1	LAMC1	2.3973	0.2642	-1.3740	0.0891	0.8703	0.3630
Cluster of Lysosome-associated membrane glycoprotein 1	LAMP1	1.3683	-0.1656	-1.0950	0.3601	0.9144	0.4839
Isoform LAMP-2B of Lysosome-associated membrane glycoprotein 2	LAMP2	4.7113	1.5824	-1.6563	0.0016	0.2603	0.2645
Ragulator complex protein LAMTOR1	LAMTOR1	6.4316	3.5947	-0.8525	0.0001	0.0112	0.6033
Glutathione S-transferase LANCL1	LANCL1	0.4529	-7.4603	-7.6344	0.8004	0.0000	0.0000
Cytosol aminopeptidase	LAP3	2.1271	-1.1699	-2.5982	0.1336	0.4266	0.0681
Isoform 2 of Leucine--tRNA ligase, cytoplasmic	LARS	-0.5142	-1.0798	-0.7099	0.7750	0.4710	0.6631
LIM and SH3 domain protein 1	LASP1	-0.6169	-1.8116	-1.3586	0.7309	0.1958	0.3702

Lipopolysaccharide-binding protein	LBP	-14.0589	-2.2192	7.4003	0.0000	0.1077	0.0000
Neutrophil gelatinase-associated lipocalin	LCN2	12.9695	7.2246	-1.7428	0.0000	0.0000	0.2362
Plastin-2	LCP1	-0.4712	-0.4760	-0.1463	0.7910	0.7782	0.9298
Cluster of Isoform 3 of L-lactate dehydrogenase A chain	LDHA	0.1541	-0.9874	-1.0746	0.9378	0.5144	0.4914
L-lactate dehydrogenase B chain	LDHB	1.6289	-2.9290	-3.9862	0.2684	0.0339	0.0075
Cluster of LEM domain-containing protein 2	LEMD2	1.7687	3.8672	2.5924	0.2212	0.0072	0.0687
Galectin-1	LGALS1	0.4214	0.3325	0.0394	0.8143	0.8414	0.9789
Galectin-3	LGALS3	6.7819	4.4861	-0.2158	0.0000	0.0025	0.9016
Galectin-3-binding protein	LGALS3BP	0.1701	-2.4512	-2.5229	0.9303	0.0749	0.0754
Galectin-7	LGALS7	9.8737	5.8830	-0.9508	0.0000	0.0003	0.5439
Phospholysine phosphohistidine inorganic pyrophosphate phosphatase	LHPP	0.2992	-9.4512	-9.4848	0.8710	0.0000	0.0000
Protein lin-7 homolog C	LIN7C	-19.5131	-10.0691	3.4083	0.0000	0.0000	0.0194
Protein ERGIC-53	LMAN1	6.3090	2.7213	-1.6267	0.0001	0.0485	0.2744
Cluster of Prelamin-A/C	LMNA	1.9512	0.3704	-0.9658	0.1736	0.8259	0.5363
Lamin-B1	LMNB1	3.2880	5.9419	3.5945	0.0208	0.0002	0.0149
Lamin-B2	LMNB2	2.6161	1.1413	-0.6618	0.0638	0.4411	0.6894
Cluster of Isoform 5 of LIM domain only protein 7	LMO7	-0.0272	-0.3820	-0.3566	0.9851	0.8208	0.8423
Apolipoprotein(a)	LPA	-1.6157	3.9730	5.0024	0.2711	0.0060	0.0014
Lipoma-preferred partner	LPP	-0.0899	-2.0419	-1.9438	0.9618	0.1380	0.1830
Leucine-rich alpha-2-glycoprotein	LRG1	-0.6880	6.0730	6.4324	0.6922	0.0002	0.0001
Pro-low-density lipoprotein receptor-related protein 1	LRP1	-1.0807	-0.1177	0.6208	0.4935	0.9410	0.7123
Low-density lipoprotein receptor-related protein 2	LRP2	0.6401	-0.6815	-1.1053	0.7156	0.6709	0.4784
Leucine-rich PPR motif-containing protein, mitochondrial	LRPPRC	-1.4437	-0.8033	0.1949	0.3307	0.6085	0.9094
Isoform 2 of Leucine-rich repeat-containing protein 15	LRRC15	20.6156	12.8949	-1.3846	0.0000	0.0000	0.3604
Leucine-rich repeat-containing protein 47	LRRC47	0.6662	5.6774	5.1211	0.7032	0.0004	0.0011
Isoform 2 of Leucine-rich repeat flightless-interacting protein 1	LRRFIP1	-1.0509	-0.2370	0.4833	0.5085	0.8846	0.7807
U6 snRNA-associated Sm-like protein LSM8	LSM8	9.5714	6.0697	-0.5615	0.0000	0.0002	0.7436
Cluster of Leukotriene A-4 hydrolase	LTA4H	6.8081	3.7313	-0.9748	0.0000	0.0090	0.5320
Lactotransferrin	LTF	2.9840	1.0045	-1.0469	0.0349	0.5059	0.5056
Lumican	LUM	0.2552	-0.4992	-0.6641	0.8882	0.7672	0.6881
Isoform 2 of Acyl-protein thioesterase 1	LYPLA1	3.2022	0.9358	-1.2630	0.0240	0.5409	0.4106
Lysozyme C	LYZ	1.2684	-0.7326	-1.5837	0.4030	0.6487	0.2875
Microtubule-actin cross-linking factor 1, isoforms 1/2/3/5	MACF1	-2.8233	-0.9111	1.0291	0.0455	0.5526	0.5114

Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 2	MAGI2	-1.6893	-5.9274	-4.6696	0.2471	0.0003	0.0024
Mesencephalic astrocyte-derived neurotrophic factor	MANF	12.8001	8.1338	-0.7346	0.0000	0.0000	0.6551
Cluster of Amine oxidase [flavin-containing] B	MAOB	-0.5120	2.2696	2.5776	0.7755	0.0991	0.0698
Isoform 2 of Microtubule-associated protein 1A	MAP1A	-0.5321	1.2982	1.6374	0.7673	0.3714	0.2711
Microtubule-associated protein 1B	MAP1B	-1.1349	-0.1383	0.6375	0.4663	0.9283	0.7047
Microtubule-associated protein 1S	MAP1S	-0.1424	-4.1345	-3.9629	0.9417	0.0045	0.0078
Isoform 3 of Microtubule-associated protein 2	MAP2	-0.3426	3.5373	3.7070	0.8507	0.0122	0.0122
Cluster of Isoform 4 of Microtubule-associated protein 4	MAP4	1.5524	-2.5544	-3.5661	0.2939	0.0632	0.0155
Microtubule-associated protein 6	MAP6	-4.1974	0.7073	3.5546	0.0041	0.6575	0.0157
Microtubule-associated protein RP/EB family member 1	MAPRE1	-0.1007	-3.5075	-3.3757	0.9559	0.0128	0.0201
Cluster of Microtubule-associated protein tau	MAPT	0.2449	-3.9441	-4.0399	0.8913	0.0063	0.0069
Mitochondrial amidoxime reducing component 2	MARC2	-5.8633	0.9130	4.8917	0.0002	0.5526	0.0017
Microtubule-associated serine/threonine-protein kinase 4	MAST4	-3.4999	-0.3065	2.0838	0.0140	0.8524	0.1477
Matrin-3	MATR3	-0.3945	-1.8082	-1.5068	0.8252	0.1960	0.3152
Cluster of Cell surface glycoprotein MUC18	MCAM	-0.1379	2.3320	2.3839	0.9426	0.0903	0.0931
Isoform 3 of Malate dehydrogenase, cytoplasmic	MDH1	0.2983	-4.3578	-4.4826	0.8710	0.0031	0.0034
Malate dehydrogenase, mitochondrial	MDH2	0.8148	-0.8765	-1.4158	0.6271	0.5706	0.3495
Cluster of Isoform 3 of Methionine aminopeptidase 2	METAP2	0.6636	3.1499	2.6409	0.7032	0.0230	0.0635
Lactadherin	MFGE8	0.4277	5.1396	4.7556	0.8134	0.0008	0.0021
Macrophage migration inhibitory factor	MIF	-0.9803	-3.0249	-2.3024	0.5403	0.0287	0.1056
Neprilysin	MME	-4.1673	-5.0311	-2.1009	0.0043	0.0010	0.1442
Matrix metalloproteinase-9	MMP9	1.7666	1.6347	0.4015	0.2216	0.2445	0.8208
Multimerin-2	MMRN2	0.3466	-1.5398	-1.7483	0.8495	0.2752	0.2354
Mannosyl-oligosaccharide glucosidase	MOGS	-0.8675	-2.2219	-1.5908	0.5997	0.1074	0.2858
Isoform H7 of Myeloperoxidase	MPO	3.0059	0.5514	-1.5068	0.0336	0.7348	0.3152
Isoform 3 of 55 kDa erythrocyte membrane protein	MPP1	0.5409	-0.2254	-0.5899	0.7660	0.8894	0.7284
MAGUK p55 subfamily member 5	MPP5	-1.0424	-5.7269	-4.9134	0.5122	0.0003	0.0016
Isoform 2 of Myosin phosphatase Rho-interacting protein	MPRIIP	3.1908	1.4081	-0.7914	0.0243	0.3242	0.6305
Isoform 2 of 3-mercaptopyruvate sulfurtransferase	MPST	-6.5251	-0.5313	3.9243	0.0001	0.7482	0.0083
C-type mannose receptor 2	MRC2	1.8085	-0.4969	-1.7202	0.2116	0.7678	0.2436

Mas-related G-protein coupled receptor member F	MRGPRF	-1.8975	-0.7772	0.5297	0.1884	0.6256	0.7603
DNA mismatch repair protein Msh2	MSH2	-1.1989	0.5866	1.3929	0.4349	0.7172	0.3581
Isoform 2 of RNA-binding protein Musashi homolog 2	MSI2	11.2396	5.4063	-2.3496	0.0000	0.0005	0.0984
Moesin	MSN	-0.9677	-3.0995	-2.3843	0.5469	0.0251	0.0931
Cytochrome c oxidase subunit 2	MT-CO2	-3.2387	-0.3480	1.8651	0.0227	0.8338	0.2044
Protein LYRIC	MTDH	-0.7747	1.2805	1.7853	0.6487	0.3789	0.2255
C-1-tetrahydrofolate synthase, cytoplasmic	MTHFD1	-0.1233	-3.6316	-3.4822	0.9483	0.0105	0.0176
Myotubularin	MTM1	-0.4369	-0.4169	-0.1117	0.8090	0.8015	0.9477
Myotrophin	MTPN	11.8925	6.9262	-1.3020	0.0000	0.0001	0.3922
Major vault protein	MVP	2.3051	1.5326	-0.0657	0.1027	0.2778	0.9671
Interferon-induced GTP-binding protein Mx2	MX2	1.2766	3.8722	2.9325	0.3989	0.0071	0.0403
Myeloid-associated differentiation marker	MYADM	7.6443	5.4026	0.0966	0.0000	0.0006	0.9557
Isoform 4 of Myosin-10	MYH10	-0.5745	-0.6211	-0.2185	0.7463	0.7035	0.9013
Isoform 2 of Myosin-11	MYH11	2.2956	15.6269	13.7811	0.1042	0.0000	0.0000
Myosin-13	MYH13	-3.6642	-2.1626	0.3731	0.0107	0.1168	0.8353
Myosin-9	MYH9	-1.6839	-3.2415	-2.0357	0.2489	0.0198	0.1591
Cluster of Myosin regulatory light chain 12B	MYL12B	-0.6741	-0.9498	-0.4734	0.7012	0.5348	0.7816
Cluster of Myosin light polypeptide 6	MYL6	-0.6894	-1.6171	-1.1182	0.6916	0.2497	0.4734
Isoform 2 of Myosin light chain kinase, smooth muscle	MYLK	-2.5245	-2.0356	-0.2787	0.0727	0.1394	0.8827
Isoform 2 of Unconventional myosin-Ib	MYO1B	0.9441	-1.1662	-1.7884	0.5587	0.4280	0.2253
Isoform 3 of Unconventional myosin-Ic	MYO1C	-1.3600	-2.7517	-1.7754	0.3639	0.0463	0.2281
Unconventional myosin-I d	MYO1D	-1.5224	0.1008	1.1363	0.3039	0.9502	0.4642
Unconventional myosin-I e	MYO1E	1.1968	-0.6872	-1.4903	0.4357	0.6691	0.3225
Unconventional myosin-I f	MYO1F	-3.1993	-0.2888	1.8963	0.0241	0.8588	0.1949
Cluster of Isoform 6 of Myoferlin	MYOF	-0.7010	3.7241	4.1347	0.6868	0.0090	0.0059
Nascent polypeptide-associated complex subunit alpha, muscle-specific form	NACA	1.8781	1.0544	-0.2443	0.1915	0.4812	0.8897
Isoform 2 of NEDD8-activating enzyme E1 regulatory subunit	NAE1	-0.5060	-1.8200	-1.4425	0.7769	0.1938	0.3384
Isoform 2 of N-acetyl-D-glucosamine kinase	NAGK	0.9842	-0.7569	-1.4138	0.5387	0.6367	0.3501
Sialic acid synthase	NANS	-0.4014	0.2288	0.4982	0.8234	0.8880	0.7743
Isoform 2 of Nucleosome assembly protein 1-like 1	NAP1L1	-2.1303	8.2887	9.5910	0.1330	0.0000	0.0000
Alpha-soluble NSF attachment protein	NAPA	3.5920	1.9958	-0.4877	0.0121	0.1491	0.7783
Isoform 3 of Nicotinate phosphoribosyltransferase	NAPRT	3.9468	1.7763	-0.9450	0.0063	0.2037	0.5471
NAD(P)H-hydrate epimerase	NAXE	-3.5402	-0.6493	1.7746	0.0132	0.6886	0.2281

Isoform 2 of Nck-associated protein 1	NCKAP1	-0.3625	-0.0894	0.1592	0.8423	0.9509	0.9243
Nucleolin	NCL	2.4457	-1.7961	-3.4302	0.0823	0.1993	0.0189
Protein NDRG1	NDRG1	-0.4589	-4.5992	-4.2037	0.7996	0.0020	0.0053
Isoform 2 of Protein NDRG2	NDRG2	0.1192	-4.7036	-4.7001	0.9493	0.0017	0.0023
Isoform 2 of NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 10, mitochondrial	NDUFA10	-6.9077	-1.5850	3.1504	0.0000	0.2596	0.0288
NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2	NDUFA2	13.0288	9.7725	0.7188	0.0000	0.0000	0.6606
NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial	NDUFA9	1.4997	0.1999	-0.8256	0.3129	0.9001	0.6171
Isoform 2 of NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial	NDUFS1	-1.2457	2.4394	3.2442	0.4110	0.0763	0.0248
Isoform 2 of NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial	NDUFS2	-0.3714	-1.2436	-0.9681	0.8367	0.3939	0.5352
NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial	NDUFS3	2.4766	10.6524	8.7730	0.0788	0.0000	0.0000
Isoform 2 of NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial	NDUFV1	-5.9006	0.2494	4.2655	0.0002	0.8771	0.0048
Isoform 2 of Nebulette	NEBL	-4.1455	-4.8806	-1.9680	0.0045	0.0013	0.1770
Cluster of Neurofilament heavy polypeptide	NEFH	17.5472	11.6564	-0.5101	0.0000	0.0000	0.7702
Nestin	NES	-2.1950	-1.6018	-0.0773	0.1211	0.2551	0.9633
Isoform 11 of Neurofascin	NFASC	1.7975	0.4759	-0.7575	0.2140	0.7782	0.6425
Isoform 2 of NHL repeat-containing protein 2	NHLRC2	0.0417	-4.8345	-4.7758	0.9771	0.0014	0.0020
Isoform 2 of Protein Niban 2	NIBAN2	1.5668	3.9387	2.8001	0.2893	0.0063	0.0499
Nidogen-1	NID1	2.0869	-0.2896	-1.7064	0.1430	0.8588	0.2488
Nidogen-2	NID2	1.4348	-0.3582	-1.3294	0.3342	0.8307	0.3815
Protein NipSnap homolog 3A	NIPSNAP3A	-1.0630	-7.8021	-6.9372	0.5027	0.0000	0.0001
Isoform 1 of Deaminated glutathione amidase	NIT1	-0.3566	-0.1470	0.0986	0.8459	0.9226	0.9548
Omega-amidase NIT2	NIT2	-7.0028	-7.1106	-2.2108	0.0000	0.0000	0.1235
Neurolysin, mitochondrial	NLN	2.6635	0.6701	-1.1569	0.0595	0.6765	0.4556
Isoform 3 of Nucleoside diphosphate kinase B	NME2	0.7698	1.3072	0.7591	0.6521	0.3689	0.6422
NAD(P) transhydrogenase, mitochondrial	NNT	2.2113	1.3213	-0.2093	0.1188	0.3636	0.9038
Nodal modulator 3	NOMO3	0.5229	-0.6811	-1.0251	0.7703	0.6709	0.5126
Non-POU domain-containing octamer-binding protein	NONO	0.2644	-0.0151	-0.1950	0.8833	0.9903	0.9094
Neurogenic locus notch homolog protein 4	NOTCH4	0.4484	-0.7214	-1.0139	0.8022	0.6515	0.5173

Puromycin-sensitive aminopeptidase	NPEPPS	-0.2073	-1.8579	-1.6831	0.9128	0.1842	0.2552
Isoform 2 of Nephhrin	NPHS1	0.3107	-1.7504	-1.9306	0.8652	0.2101	0.1868
Podocin	NPHS2	-1.2556	-3.6292	-2.7083	0.4058	0.0105	0.0577
Isoform 2 of Nucleophosmin	NPM1	18.8567	-0.8130	13.6470	0.0000	0.6054	0.0000
Cluster of Isoform 6 of Nephronectin	NPNT	-1.3459	0.5785	1.4851	0.3696	0.7196	0.3234
Ribosyldihyronicotinamide dehydrogenase [quinone]	NQO2	-0.0660	-8.3478	-8.1524	0.9677	0.0000	0.0000
Isoform 2 of Nuclear receptor-interacting protein 2	NRIP2	-1.8310	-1.0362	0.2301	0.2049	0.4901	0.8970
Isoform 2 of Neuropilin-1	NRP1	-4.0827	0.0316	2.8129	0.0050	0.9822	0.0489
Isoform 3 of NSFL1 cofactor p47	NSFL1C	1.0633	-0.3490	-1.0672	0.5027	0.8337	0.4956
5'(3')-deoxyribonucleotidase, cytosolic type	NT5C	-0.9320	0.1702	0.8022	0.5618	0.9131	0.6276
Cytosolic purine 5'-nucleotidase	NT5C2	0.2915	0.7771	0.5644	0.8710	0.6256	0.7424
Isoform 3 of Netrin-4	NTN4	-1.0614	2.7772	3.4504	0.5029	0.0447	0.0183
Nucleobindin-1	NUCB1	1.3371	0.4368	-0.4821	0.3733	0.7977	0.7808
U8 snoRNA-decapping enzyme	NUDT16	1.8019	-1.2984	-2.5028	0.2130	0.3714	0.0779
Nucleoredoxin	NXN	2.2416	1.3986	-0.1540	0.1130	0.3284	0.9252
Isoform p41 of 2'-5'-oligoadenylate synthase 1	OAS1	-4.8176	-0.6554	2.6390	0.0013	0.6868	0.0636
2'-5'-oligoadenylate synthase 2	OAS2	1.9902	3.1768	1.7635	0.1644	0.0221	0.2307
Isoform B of Inositol polyphosphate 5-phosphatase OCRL	OCRL	-0.2369	1.1819	1.3220	0.8958	0.4208	0.3849
Isoform 2 of 2-oxoglutarate dehydrogenase, mitochondrial	OGDH	0.5035	0.8773	0.5184	0.7769	0.5705	0.7672
Obg-like ATPase 1	OLA1	0.8632	-0.1887	-0.7735	0.6018	0.9044	0.6387
Isoform 2 of Optineurin	OPTN	-0.9721	-2.0822	-1.3823	0.5441	0.1294	0.3607
Alpha-1-acid glycoprotein 1	ORM1	0.2492	4.6008	4.3480	0.8898	0.0020	0.0042
Alpha-1-acid glycoprotein 2	ORM2	1.5774	7.6639	6.4510	0.2854	0.0000	0.0001
Osteoclast-stimulating factor 1	OSTF1	-2.0582	-3.2641	-1.8028	0.1487	0.0191	0.2218
Ubiquitin thioesterase OTUB1	OTUB1	-1.2979	3.7608	4.5774	0.3904	0.0086	0.0029
Succinyl-CoA:3-ketoacid coenzyme A transferase 1, mitochondrial	OXCT1	6.7689	2.7375	-1.9241	0.0000	0.0473	0.1883
Protein disulfide-isomerase	P4HB	2.7302	1.1647	-0.7166	0.0532	0.4285	0.6617
Isoform 2 of Proliferation-associated protein 2G4	PA2G4	-2.9167	2.1304	4.0794	0.0390	0.1214	0.0064
Cluster of Polyadenylate-binding protein 3	PABPC3	13.6214	8.9751	-0.4681	0.0000	0.0000	0.7848
Cluster of Platelet-activating factor acetylhydrolase IB subunit alpha	PAFAH1B1	2.7356	4.4649	2.5205	0.0528	0.0026	0.0756
Cluster of Platelet-activating factor acetylhydrolase IB subunit beta	PAFAH1B2	0.1463	-1.5869	-1.6580	0.9399	0.2591	0.2641
Isoform 2 of Serine/threonine-protein kinase PAK 1	PAK1	4.0378	2.3383	-0.4552	0.0054	0.0898	0.7900

Palladin	PALLD	-0.3864	-0.8548	-0.5760	0.8274	0.5840	0.7344
Cluster of Papilin	PAPLN	0.6166	-0.9353	-1.3386	0.7309	0.5409	0.3790
Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 1	PAPSS1	0.3474	-0.1523	-0.3863	0.8495	0.9204	0.8275
Isoform 2 of Partitioning defective 3 homolog B	PARD3B	-1.9711	-4.3909	-2.9687	0.1697	0.0029	0.0386
Protein/nucleic acid deglycase DJ-1	PARK7	-0.2093	-2.8388	-2.6451	0.9119	0.0401	0.0634
Poly [ADP-ribose] polymerase 1	PARP1	4.1385	1.8512	-1.0021	0.0045	0.1858	0.5203
Alpha-parvin	PARVA	-0.9902	-3.6007	-2.8611	0.5366	0.0111	0.0448
InaD-like protein	PATJ	0.8268	1.4799	0.8898	0.6220	0.2992	0.5808
PRKC apoptosis WT1 regulator protein	PAWR	-0.9423	6.8431	7.3619	0.5588	0.0001	0.0000
Phenazine biosynthesis-like domain-containing protein	PBLD	0.2316	-9.7399	-9.7222	0.8991	0.0000	0.0000
Pyruvate carboxylase, mitochondrial	PC	-0.3122	-0.7235	-0.4977	0.8647	0.6504	0.7743
Pterin-4-alpha-carbinolamine dehydratase	PCBD1	-1.6004	0.4398	1.5224	0.2765	0.7972	0.3107
Poly(rC)-binding protein 1	PCBP1	-0.3131	-1.7927	-1.5471	0.8646	0.2000	0.3008
Isoform 2 of Poly(rC)-binding protein 2	PCBP2	1.0344	-0.3001	-0.9995	0.5158	0.8549	0.5208
Isoform 2 of Propionyl-CoA carboxylase beta chain, mitochondrial	PCCB	1.6938	-0.6531	-1.7954	0.2459	0.6880	0.2240
Phosphoenolpyruvate carboxykinase [GTP], mitochondrial	PCK2	-22.5599	-10.8067	4.7600	0.0000	0.0000	0.0021
Isoform 2 of Protein-L-isoaspartate(D-aspartate) O-methyltransferase	PCMT1	-18.3185	-14.1704	-1.4331	0.0000	0.0000	0.3427
Prenylcysteine oxidase 1	PCYOX1	0.5072	-0.4216	-0.7597	0.7769	0.7997	0.6422
Programmed cell death protein 10	PDCD10	-7.2889	-0.2537	4.7174	0.0000	0.8763	0.0023
Isoform 2 of Programmed cell death protein 6	PDCD6	-0.0695	-2.8163	-2.7182	0.9677	0.0416	0.0572
Isoform 2 of Programmed cell death 6-interacting protein	PDCD6IP	-1.2792	-2.5782	-1.6601	0.3988	0.0609	0.2636
Platelet-derived growth factor receptor beta	PDGFRB	-0.4376	1.7412	2.0080	0.8090	0.2116	0.1659
Isoform 2 of Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial	PDHA1	-5.2044	-0.6120	2.9453	0.0007	0.7072	0.0401
Isoform 3 of Pyruvate dehydrogenase E1 component subunit beta, mitochondrial	PDHB	1.0238	4.3201	3.5447	0.5219	0.0033	0.0159
Protein disulfide-isomerase A3	PDIA3	1.6213	-1.3089	-2.3900	0.2695	0.3684	0.0931
Protein disulfide-isomerase A4	PDIA4	1.1694	-2.5730	-3.3234	0.4468	0.0614	0.0220
Isoform 2 of Protein disulfide-isomerase A6	PDIA6	4.0557	-0.4479	-3.2033	0.0052	0.7924	0.0265
PDZ and LIM domain protein 1	PDLIM1	-0.4008	-0.6287	-0.3442	0.8234	0.6992	0.8452
Cluster of Isoform 5 of PDZ and LIM domain protein 2	PDLIM2	-3.0443	-2.3248	-0.2086	0.0315	0.0913	0.9038

Cluster of PDZ and LIM domain protein 5	PDLIM5	-3.4905	-3.4863	-1.0451	0.0143	0.0131	0.5063
Cluster of Isoform 2 of PDZ and LIM domain protein 7	PDLIM7	-1.4464	-1.7994	-0.7814	0.3302	0.1985	0.6354
Pyridoxal kinase	PDXK	1.4563	-1.1392	-2.1110	0.3279	0.4420	0.1423
Phosphatidylethanolamine-binding protein 1	PEBP1	-2.2864	-5.2361	-3.5838	0.1052	0.0007	0.0151
Cluster of Isoform Delta13 of Platelet endothelial cell adhesion molecule	PECAM1	4.9754	0.9132	-2.4934	0.0010	0.5526	0.0790
Peflin	PEF1	-1.3189	-0.0772	0.8229	0.3812	0.9575	0.6186
Isoform 2 of Xaa-Pro dipeptidase	PEPD	-2.9814	-2.1555	-0.0852	0.0350	0.1180	0.9607
Isoform 2 of ATP-dependent 6-phosphofructokinase, liver type	PFKL	1.5357	-0.4737	-1.5116	0.3002	0.7794	0.3145
ATP-dependent 6-phosphofructokinase, platelet type	PFKP	3.5945	2.2577	-0.2322	0.0121	0.1008	0.8968
Profilin-1	PFN1	2.6301	0.0504	-1.7426	0.0626	0.9716	0.2362
Isoform IIb of Profilin-2	PFN2	-0.0794	-3.5794	-3.4608	0.9646	0.0114	0.0180
Phosphoglycerate mutase 1	PGAM1	1.4912	-2.1816	-3.1584	0.3158	0.1139	0.0285
Isoform 2 of 6-phosphogluconate dehydrogenase, decarboxylating	PGD	-0.2248	-3.1185	-2.9091	0.9017	0.0243	0.0417
Phosphoglycerate kinase 1	PGK1	-0.4429	-3.7496	-3.3802	0.8056	0.0087	0.0200
6-phosphogluconolactonase	PGLS	0.5885	-2.2891	-2.6489	0.7395	0.0965	0.0631
Isoform 2 of N-acetylmuramoyl-L-alanine amidase	PGLYRP2	0.1192	0.6038	0.5117	0.9493	0.7088	0.7702
Isoform 2 of Phosphoglucomutase-1	PGM1	-5.1139	-4.6467	-1.0785	0.0008	0.0019	0.4902
Phosphoglucomutase-2	PGM2	5.6560	-0.8127	-4.6520	0.0003	0.6054	0.0025
Phosphoglucomutase-like protein 5	PGM5	1.3551	-0.7035	-1.6141	0.3653	0.6580	0.2782
Membrane-associated progesterone receptor component 1	PGRMC1	3.9072	0.9257	-1.7533	0.0068	0.5475	0.2345
Isoform 2 of Membrane-associated progesterone receptor component 2	PGRMC2	-2.4781	3.3911	5.0185	0.0788	0.0153	0.0014
Isoform 3 of Phosphatase and actin regulator 4	PHACTR4	-0.5169	-0.6395	-0.2757	0.7734	0.6929	0.8827
Prohibitin	PHB	-0.5491	-0.5424	-0.1585	0.7596	0.7409	0.9243
Isoform 2 of Prohibitin-2	PHB2	-0.4954	-1.2715	-0.9110	0.7785	0.3829	0.5675
D-3-phosphoglycerate dehydrogenase	PHGDH	-0.2882	-1.9173	-1.6864	0.8727	0.1680	0.2543
Isoform 2 of Pleckstrin homology-like domain family B member 1	PHLDB1	-0.0022	-1.6248	-1.5940	0.9997	0.2484	0.2847
Cluster of Phosphatidylinositol 4-kinase alpha	PI4KA	1.4311	-0.5114	-1.4773	0.3357	0.7589	0.3252
Isoform 2 of Phosphatidylinositol-binding clathrin assembly protein	PICALM	0.9843	-2.7731	-3.3938	0.5387	0.0449	0.0196
Polymeric immunoglobulin receptor	PIGR	10.9965	7.4327	-0.1941	0.0000	0.0000	0.9094

Prolactin-inducible protein	PIP	-9.8637	-0.2264	6.4987	0.0000	0.8893	0.0001
Isoform 2 of Phosphatidylinositol 5-phosphate 4-kinase type-2 gamma	PIP4K2C	-0.3519	-2.0245	-1.7482	0.8482	0.1421	0.2354
Phosphatidylinositol transfer protein alpha isoform	PITPNA	-6.8195	-0.8543	3.8078	0.0000	0.5840	0.0102
Pyruvate kinase PKM	PKM	3.2399	0.4718	-1.7444	0.0227	0.7796	0.2362
Isoform 1 of Plakophilin-1	PKP1	-2.8660	-1.7496	0.2348	0.0427	0.2101	0.8955
Isoform 2 of Plakophilin-4	PKP4	0.4262	-1.4254	-1.6901	0.8134	0.3175	0.2535
Secretory phospholipase A2 receptor	PLA2R1	4.0208	4.0980	1.2844	0.0056	0.0049	0.4008
1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2	PLCG2	-6.1081	-2.4149	1.7905	0.0001	0.0796	0.2253
Cluster of Plectin	PLEC	0.9405	0.3707	-0.2768	0.5592	0.8259	0.8827
Pleckstrin homology domain-containing family O member 2	PLEKHO2	-0.3477	-0.6817	-0.4325	0.8495	0.6709	0.8041
Plasminogen	PLG	2.3528	0.4956	-1.1165	0.0958	0.7683	0.4740
Cluster of Isoform 4 of Perilipin-3	PLIN3	3.7827	3.0731	0.4402	0.0086	0.0262	0.7996
Multifunctional procollagen lysine hydroxylase and glycosyltransferase LH3	PLOD3	2.5640	0.9213	-0.8424	0.0685	0.5484	0.6081
Cluster of Plastin-3	PLS3	0.6211	-0.1959	-0.6156	0.7284	0.9027	0.7150
Cluster of Isoform PML-11 of Protein PML	PML	3.9209	2.7401	0.0191	0.0067	0.0472	0.9900
Purine nucleoside phosphorylase	PNP	-0.0271	-4.0073	-3.9166	0.9851	0.0057	0.0084
Pyridoxine-5'-phosphate oxidase	PNPO	-3.2730	-0.4001	1.8372	0.0214	0.8124	0.2119
Isoform 2 of Podocalyxin	PODXL	-2.4075	-4.2798	-2.5623	0.0881	0.0035	0.0714
Protein O-glycosyltransferase 3	POGLUT3	2.2993	1.3478	-0.2432	0.1036	0.3508	0.8899
Serum paraoxonase/arylesterase 1	PON1	2.7648	1.7541	-0.1614	0.0502	0.2093	0.9236
Isoform 1 of Serum paraoxonase/arylesterase 2	PON2	-0.1471	-3.2765	-3.1173	0.9399	0.0187	0.0301
NADPH--cytochrome P450 reductase	POR	-5.1114	-0.1910	3.2953	0.0008	0.9043	0.0232
Periostin	POSTN	2.3408	2.4784	0.8387	0.0974	0.0714	0.6086
Inorganic pyrophosphatase	PPA1	8.5398	4.6615	-1.2414	0.0000	0.0019	0.4209
Cluster of Peptidyl-prolyl cis-trans isomerase A	PPIA	-0.1055	-2.1395	-2.0291	0.9533	0.1201	0.1605
Peptidyl-prolyl cis-trans isomerase B	PPIB	3.8323	0.4513	-2.1680	0.0078	0.7908	0.1306
Protein phosphatase 1F	PPM1F	-1.7890	-1.6183	-0.3701	0.2158	0.2497	0.8357
Cluster of Serine/threonine-protein phosphatase PP1-beta catalytic subunit	PPP1CB	1.2172	0.2789	-0.5555	0.4256	0.8640	0.7458
Protein phosphatase 1 regulatory subunit 12A	PPP1R12A	0.3748	3.1246	2.8129	0.8353	0.0241	0.0489
Protein phosphatase 1 regulatory subunit 26	PPP1R26	-1.1075	-1.4957	-0.7141	0.4784	0.2926	0.6617

Serine/threonine-protein phosphatase 2A catalytic subunit beta isoform	PPP2CB	0.8503	3.5746	2.9308	0.6094	0.0115	0.0404
Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform	PPP2R1A	1.7912	-1.3759	-2.5717	0.2158	0.3371	0.0703
Isoform 2 of Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A beta isoform	PPP2R1B	-0.8840	-5.5780	-4.8751	0.5897	0.0004	0.0017
PRA1 family protein 2	PRAF2	-0.4987	4.1746	4.4392	0.7785	0.0042	0.0036
Peroxiredoxin-1	PRDX1	-1.7539	-3.3423	-2.0870	0.2256	0.0167	0.1471
Cluster of Peroxiredoxin-2	PRDX2	-1.2936	-3.8954	-2.9438	0.3917	0.0068	0.0401
Isoform 2 of Thioredoxin-dependent peroxide reductase, mitochondrial	PRDX3	-0.0519	-0.8435	-0.7930	0.9732	0.5893	0.6305
Peroxiredoxin-4	PRDX4	-2.3299	11.0749	12.4629	0.0989	0.0000	0.0000
Cluster of Isoform Cytoplasmic+peroxisomal of Peroxiredoxin-5, mitochondrial	PRDX5	0.5040	-2.1036	-2.4091	0.7769	0.1261	0.0910
Peroxiredoxin-6	PRDX6	-1.4653	-5.3031	-4.2091	0.3247	0.0006	0.0053
Prolyl endopeptidase	PREP	2.0664	0.6712	-0.7490	0.1470	0.6765	0.6470
Bone marrow proteoglycan	PRG2	2.0729	12.5644	10.9256	0.1457	0.0000	0.0000
Proteoglycan 3	PRG3	9.5456	6.4648	-0.1559	0.0000	0.0001	0.9252
Isoform 3 of 5'-AMP-activated protein kinase subunit gamma-1	PRKAG1	-0.5187	1.7457	2.0677	0.7732	0.2111	0.1516
cAMP-dependent protein kinase type I-alpha regulatory subunit	PRKAR1A	-0.0691	0.4969	0.5351	0.9677	0.7678	0.7571
Isoform 2 of cAMP-dependent protein kinase type II-alpha regulatory subunit	PRKAR2A	-0.0676	-0.5486	-0.4927	0.9677	0.7364	0.7755
cAMP-dependent protein kinase type II-beta regulatory subunit	PRKAR2B	-0.5732	-9.0608	-8.5069	0.7463	0.0000	0.0000
Cluster of Protein kinase C alpha type	PRKCA	-0.9810	1.2264	1.8727	0.5403	0.4006	0.2019
Protein kinase C iota type	PRKCI	0.9980	-1.1175	-1.7774	0.5324	0.4516	0.2281
Isoform 2 of Glucosidase 2 subunit beta	PRKCSH	-3.9532	-3.5735	-0.8155	0.0063	0.0115	0.6209
Isoform 2 of DNA-dependent protein kinase catalytic subunit	PRKDC	1.5779	1.3061	0.2074	0.2854	0.3691	0.9038
Vitamin K-dependent protein S	PROS1	4.1937	2.6210	-0.2837	0.0041	0.0570	0.8818
Pre-mRNA-processing-splicing factor 8	PRPF8	-1.9216	-1.6380	-0.2992	0.1816	0.2438	0.8743
Serine protease 23	PRSS23	8.7998	4.8519	-1.2316	0.0000	0.0014	0.4244
Periaxin	PRX	1.4515	-0.2021	-1.1875	0.3288	0.8990	0.4457
Phosphoserine aminotransferase	PSAT1	0.1954	-3.7240	-3.7901	0.9192	0.0090	0.0105
Isoform Long of Proteasome subunit alpha type-1	PSMA1	0.4808	-2.3693	-2.6542	0.7863	0.0853	0.0627
Proteasome subunit alpha type-2	PSMA2	1.8949	-2.1335	-3.3862	0.1889	0.1211	0.0199
Proteasome subunit alpha type-4	PSMA4	-0.3882	-8.1263	-7.7154	0.8273	0.0000	0.0000
Proteasome subunit alpha type-5	PSMA5	2.3149	-1.8815	-3.4249	0.1016	0.1782	0.0190

Proteasome subunit alpha type-6	PSMA6	-0.7251	0.0967	0.5890	0.6759	0.9509	0.7284
Cluster of Proteasome subunit alpha type-7	PSMA7	5.1945	0.8232	-2.7311	0.0007	0.6009	0.0560
Proteasome subunit beta type-1	PSMB1	-1.9027	-1.6024	-0.2771	0.1869	0.2551	0.8827
Proteasome subunit beta type-2	PSMB2	-0.2516	-8.4868	-8.1625	0.8898	0.0000	0.0000
Proteasome subunit beta type-3	PSMB3	2.4577	6.9469	5.1471	0.0808	0.0001	0.0011
Proteasome subunit beta type-4	PSMB4	2.8406	0.7179	-1.2306	0.0444	0.6537	0.4244
Proteasome subunit beta type-6	PSMB6	0.8498	-1.0475	-1.6076	0.6094	0.4844	0.2799
Proteasome subunit beta type-7	PSMB7	-0.1395	-2.9629	-2.8144	0.9420	0.0320	0.0489
Proteasome subunit beta type-8	PSMB8	-1.8412	2.6575	3.8642	0.2019	0.0541	0.0092
Proteasome subunit beta type-9	PSMB9	13.1044	7.6021	-1.4641	0.0000	0.0000	0.3299
26S proteasome regulatory subunit 4	PSMC1	4.0590	2.5208	-0.2904	0.0052	0.0666	0.8783
26S proteasome regulatory subunit 7	PSMC2	-2.6760	-1.0266	0.8152	0.0583	0.4957	0.6209
26S proteasome regulatory subunit 6A	PSMC3	-2.6652	-1.8543	-0.0048	0.0595	0.1850	0.9962
Isoform 2 of 26S proteasome regulatory subunit 6B	PSMC4	-5.1158	-6.2637	-2.6651	0.0008	0.0002	0.0615
26S proteasome regulatory subunit 10B	PSMC6	0.4576	2.1821	1.8309	0.7998	0.1139	0.2139
Isoform 2 of 26S proteasome non-ATPase regulatory subunit 11	PSMD11	-1.3383	-2.2874	-1.3343	0.3731	0.0966	0.3798
26S proteasome non-ATPase regulatory subunit 12	PSMD12	2.9287	2.1736	0.1388	0.0381	0.1148	0.9316
26S proteasome non-ATPase regulatory subunit 14	PSMD14	5.8390	3.3054	-0.7327	0.0002	0.0178	0.6556
Cluster of 26S proteasome non-ATPase regulatory subunit 2	PSMD2	3.2953	-0.4766	-2.7134	0.0206	0.7782	0.0575
26S proteasome non-ATPase regulatory subunit 3	PSMD3	2.6483	1.6685	-0.1661	0.0611	0.2333	0.9236
26S proteasome non-ATPase regulatory subunit 8	PSMD8	-0.1618	-3.7598	-3.5818	0.9329	0.0086	0.0151
Proteasome activator complex subunit 1	PSME1	-1.1873	-1.5639	-0.7267	0.4398	0.2664	0.6567
Proteasome activator complex subunit 2	PSME2	-0.8251	-1.7385	-1.1450	0.6227	0.2123	0.4611
Paraspeckle component 1	PSPC1	2.3946	1.2618	-0.3926	0.0894	0.3862	0.8256
Cluster of Isoform 2 of Polypyrimidine tract-binding protein 1	PTBP1	-0.1395	-1.5271	-1.4046	0.9420	0.2800	0.3533
Isoform 3 of Prostaglandin E synthase 3	PTGES3	12.1134	0.4923	-7.7705	0.0000	0.7693	0.0000
Isoform 2 of Prostaglandin reductase 1	PTGR1	1.3704	7.1341	6.0718	0.3593	0.0000	0.0003
Isoform 1 of Serine/threonine-protein phosphatase 2A activator	PTPA	2.2036	2.5001	0.9535	0.1194	0.0688	0.5431
Isoform 2 of Receptor-type tyrosine-protein phosphatase O	PTPRO	-0.1249	-0.0972	-0.0103	0.9482	0.9509	0.9933
Isoform 2 of Poly(U)-binding-splicing factor PUF60	PUF60	-1.5326	-0.6419	0.4140	0.3005	0.6919	0.8142

Transcriptional activator protein Pur-alpha	PURA	-0.6069	-2.2698	-1.8154	0.7343	0.0991	0.2184
Transcriptional activator protein Pur-beta	PURB	0.7167	0.3573	-0.1375	0.6796	0.8308	0.9316
Peroxidasin homolog	PXDN	-3.2371	-2.1166	0.1273	0.0227	0.1236	0.9365
Glycogen phosphorylase, brain form	PYGB	7.6361	3.9000	-1.3734	0.0000	0.0068	0.3630
Isoform 2 of Glycogen phosphorylase, liver form	PYGL	2.6901	3.5927	1.6949	0.0570	0.0112	0.2530
Sulfhydryl oxidase 2	QSOX2	-0.2122	-0.6103	-0.4547	0.9101	0.7076	0.7900
Isoform 2 of Ras-related protein Rab-11B	RAB11B	-0.5920	1.4514	1.8286	0.7388	0.3098	0.2144
Cluster of Ras-related protein Rab-14	RAB14	0.1048	-1.1728	-1.2231	0.9533	0.4258	0.4271
Isoform 2 of Ras-related protein Rab-5A	RAB5A	-7.4334	-6.7036	-1.5179	0.0000	0.0001	0.3122
Ras-related protein Rab-5B	RAB5B	-7.2298	-4.8667	0.1473	0.0000	0.0013	0.9298
Ras-related protein Rab-5C	RAB5C	0.4784	-1.8665	-2.1588	0.7866	0.1817	0.1326
Isoform 2 of Ras-related protein Rab-6A	RAB6A	-2.7270	-1.5205	0.3650	0.0533	0.2827	0.8384
Ras-related protein Rab-7a	RAB7A	-0.4946	-1.3095	-0.9489	0.7785	0.3684	0.5448
Cluster of Ras-related C3 botulinum toxin substrate 3	RAC3	13.7778	8.9638	-0.5857	0.0000	0.0000	0.7298
Receptor of activated protein C kinase 1	RACK1	0.7223	0.0108	-0.4816	0.6767	0.9923	0.7808
Isoform 3 of UV excision repair protein RAD23 homolog A	RAD23A	0.5893	2.9166	2.4625	0.7395	0.0347	0.0827
Isoform 2 of UV excision repair protein RAD23 homolog B	RAD23B	-1.1451	-0.5249	0.2648	0.4604	0.7508	0.8833
Isoform 3 of Ankyrin	RAI14	3.4993	1.7116	-0.7036	0.0140	0.2206	0.6672
Ras-related protein Ral-A	RALA	6.0233	4.6941	0.5053	0.0002	0.0018	0.7716
GTP-binding nuclear protein Ran	RAN	2.4508	0.9399	-0.7469	0.0817	0.5404	0.6473
Cluster of Ras-related protein Rap-1b	RAP1B	-2.1905	-3.6330	-2.0749	0.1216	0.0105	0.1499
Arginine--tRNA ligase, cytoplasmic	RARS	3.0045	2.3565	0.2668	0.0337	0.0871	0.8827
Ras-interacting protein 1	RASIP1	-2.8308	-4.7958	-2.7805	0.0452	0.0015	0.0518
RNA-binding protein 14	RBM14	3.6908	2.0881	-0.4644	0.0102	0.1283	0.7873
RNA-binding protein 3	RBM3	0.8853	0.4496	-0.1617	0.5894	0.7916	0.9236
Isoform 2 of RNA-binding protein 39	RBM39	1.9143	3.9645	2.5887	0.1837	0.0061	0.0689
Isoform 2 of RNA-binding motif protein, X chromosome	RBMX	2.4006	-1.0257	-2.6429	0.0888	0.4958	0.0634
Retinol-binding protein 4	RBP4	2.4712	0.7054	-0.9912	0.0793	0.6580	0.5257
Reticulocalbin-1	RCN1	8.8461	5.6721	-0.4577	0.0000	0.0004	0.7900
Isoform 2 of Reticulocalbin-2	RCN2	7.8523	4.3305	-1.0980	0.0000	0.0032	0.4830
Isoform 5 of Radixin	RDX	-0.9606	-3.4285	-2.7122	0.5498	0.0144	0.0575
Isoform 2 of Renin	REN	-7.8431	-0.9447	4.4165	0.0000	0.5377	0.0038
Raftlin	RFTN1	0.5927	1.9203	1.4818	0.7388	0.1677	0.3243
Cluster of Rho-related GTP-binding protein RhoC	RHOC	0.0001	-1.6443	-1.6147	1.0000	0.2417	0.2782

2-iminobutanoate/2-iminopropanoate deaminase	RIDA	-29.8464	-24.1730	-3.4005	0.0000	0.0000	0.0194
Isoform 3 of Rho family-interacting cell polarization regulator 1	RIPOR1	3.5819	3.1860	0.6879	0.0123	0.0218	0.6737
Eosinophil cationic protein	RNASE3	18.7327	11.4503	-1.5201	0.0000	0.0000	0.3114
Ribonuclease inhibitor	RNH1	-0.4257	-1.6955	-1.3749	0.8134	0.2252	0.3630
Aminopeptidase B	RNPEP	-1.4760	0.5770	1.5723	0.3212	0.7200	0.2922
Isoform 3 of 60 kDa SS-A/Ro ribonucleoprotein	RO60	-0.6976	-2.4139	-1.8951	0.6868	0.0796	0.1950
Rho-associated protein kinase 2	ROCK2	0.5968	-1.2839	-1.6674	0.7381	0.3779	0.2611
60S ribosomal protein L10	RPL10	8.9347	5.9386	-0.2564	0.0000	0.0002	0.8859
60S ribosomal protein L10a	RPL10A	2.0468	0.1697	-1.2280	0.1513	0.9131	0.4245
Isoform 2 of 60S ribosomal protein L11	RPL11	1.8817	1.3694	0.0626	0.1915	0.3402	0.9675
60S ribosomal protein L12	RPL12	2.6064	0.3658	-1.4167	0.0647	0.8268	0.3494
60S ribosomal protein L13	RPL13	0.5615	-0.3856	-0.7613	0.7504	0.8198	0.6422
60S ribosomal protein L14	RPL14	0.8077	-0.1662	-0.7136	0.6322	0.9144	0.6617
60S ribosomal protein L15	RPL15	0.0543	0.1109	0.0719	0.9727	0.9441	0.9647
Isoform 3 of 60S ribosomal protein L17	RPL17	0.7418	2.7224	2.1679	0.6680	0.0485	0.1306
Isoform 2 of 60S ribosomal protein L18	RPL18	1.4727	2.4993	1.4508	0.3220	0.0688	0.3347
60S ribosomal protein L18a	RPL18A	-1.4989	4.6777	5.6148	0.3129	0.0018	0.0005
60S ribosomal protein L19	RPL19	12.5844	8.4746	-0.2529	0.0000	0.0000	0.8880
60S ribosomal protein L21	RPL21	7.8667	4.3001	-1.1376	0.0000	0.0034	0.4639
60S ribosomal protein L22	RPL22	2.0830	1.7063	0.2563	0.1438	0.2220	0.8859
60S ribosomal protein L23	RPL23	2.7925	-0.1565	-2.0564	0.0479	0.9184	0.1546
60S ribosomal protein L23a	RPL23A	-0.2424	1.2797	1.4218	0.8926	0.3790	0.3471
60S ribosomal protein L24	RPL24	-0.1231	12.8040	12.6572	0.9483	0.0000	0.0000
60S ribosomal protein L27a	RPL27A	5.8282	3.7444	-0.2943	0.0002	0.0088	0.8763
Cluster of 60S ribosomal protein L3	RPL3	1.8876	-0.0946	-1.3790	0.1904	0.9509	0.3612
60S ribosomal protein L4	RPL4	1.3433	0.9968	0.0635	0.3707	0.5097	0.9674
60S ribosomal protein L5	RPL5	-0.6019	5.1678	5.4848	0.7358	0.0008	0.0006
60S ribosomal protein L6	RPL6	2.8248	2.7665	0.7919	0.0455	0.0452	0.6305
60S ribosomal protein L7	RPL7	0.4719	0.8117	0.4756	0.7910	0.6056	0.7812
60S ribosomal protein L7a	RPL7A	2.1525	2.6575	1.1429	0.1286	0.0541	0.4620
60S ribosomal protein L8	RPL8	-1.0012	0.2751	0.9524	0.5307	0.8656	0.5433
60S ribosomal protein L9	RPL9	1.4839	3.5546	2.4794	0.3177	0.0119	0.0805
Cluster of 60S acidic ribosomal protein P0	RPLP0	1.7227	3.0479	1.8192	0.2368	0.0274	0.2173
60S acidic ribosomal protein P2	RPLP2	1.7779	0.6384	-0.5845	0.2184	0.6932	0.7301
Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1	RPN1	0.8496	0.4924	-0.0954	0.6094	0.7693	0.9559

Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 2	RPN2	0.0331	-2.2146	-2.1972	0.9825	0.1083	0.1258
Cluster of 40S ribosomal protein S10	RPS10	1.1061	1.9551	1.1661	0.4784	0.1591	0.4526
40S ribosomal protein S13	RPS13	1.1220	8.5603	7.6416	0.4705	0.0000	0.0000
40S ribosomal protein S14	RPS14	-23.7466	-0.4004	15.7874	0.0000	0.8124	0.0000
40S ribosomal protein S15	RPS15	-4.6955	-0.0760	3.1249	0.0016	0.9575	0.0300
40S ribosomal protein S15a	RPS15A	0.3316	-0.8308	-1.0419	0.8559	0.5955	0.5070
40S ribosomal protein S16	RPS16	1.7231	1.0067	-0.1855	0.2368	0.5054	0.9140
40S ribosomal protein S17	RPS17	1.6250	-0.4383	-1.5377	0.2695	0.7972	0.3051
40S ribosomal protein S18	RPS18	0.0847	-0.5146	-0.5631	0.9634	0.7576	0.7429
40S ribosomal protein S19	RPS19	-0.4951	3.8831	4.1505	0.7785	0.0070	0.0058
40S ribosomal protein S2	RPS2	-0.0824	0.6075	0.6527	0.9634	0.7083	0.6949
40S ribosomal protein S20	RPS20	0.9155	0.5590	-0.0749	0.5704	0.7291	0.9633
40S ribosomal protein S21	RPS21	14.8093	12.0969	1.7881	0.0000	0.0000	0.2253
40S ribosomal protein S23	RPS23	1.9306	12.1601	10.6255	0.1792	0.0000	0.0000
Isoform 3 of 40S ribosomal protein S24	RPS24	3.0303	1.7703	-0.3264	0.0324	0.2049	0.8575
40S ribosomal protein S26	RPS26	1.8692	1.7003	0.3960	0.1936	0.2240	0.8248
Ubiquitin-40S ribosomal protein S27a	RPS27A	0.2878	-1.6854	-1.8512	0.8727	0.2280	0.2073
40S ribosomal protein S28	RPS28	1.4657	8.8261	7.6684	0.3247	0.0000	0.0000
Cluster of 40S ribosomal protein S3	RPS3	1.5347	1.3342	0.2644	0.3002	0.3567	0.8833
40S ribosomal protein S3a	RPS3A	1.9500	1.2625	-0.0890	0.1736	0.3862	0.9590
40S ribosomal protein S4, X isoform	RPS4X	2.8026	-0.2238	-2.1294	0.0472	0.8897	0.1385
40S ribosomal protein S5	RPS5	3.0760	-0.2905	-2.3812	0.0298	0.8588	0.0934
40S ribosomal protein S6	RPS6	0.7004	0.3849	-0.0993	0.6868	0.8198	0.9548
40S ribosomal protein S7	RPS7	2.4971	-0.4541	-2.1475	0.0764	0.7895	0.1347
40S ribosomal protein S8	RPS8	2.7995	2.6494	0.6942	0.0474	0.0548	0.6718
40S ribosomal protein S9	RPS9	1.7642	11.1421	9.7393	0.2222	0.0000	0.0000
40S ribosomal protein SA	RPSA	1.9977	0.6742	-0.6991	0.1633	0.6746	0.6696
Cluster of Ras-related protein R-Ras	RRAS	-2.3105	-2.8019	-1.1771	0.1020	0.0427	0.4488
Ribosome-binding protein 1	RRBP1	1.4557	3.1557	2.1069	0.3279	0.0229	0.1428
Isoform 2 of Remodeling and spacing factor 1	RSF1	-1.1838	-1.9990	-1.1564	0.4402	0.1484	0.4556
Ribosomal L1 domain-containing protein 1	RSL1D1	3.2858	2.7506	0.4622	0.0209	0.0463	0.7877
Ras suppressor protein 1	RSU1	-1.0409	-2.5041	-1.7497	0.5122	0.0684	0.2354
tRNA-splicing ligase RtcB homolog	RTCB	-2.9787	3.3296	5.2993	0.0351	0.0170	0.0009
Cluster of Reticulon-4	RTN4	-0.0768	6.2540	6.1937	0.9648	0.0002	0.0002
RNA transcription, translation and transport factor protein	RTRAF	1.6223	0.6423	-0.4747	0.2695	0.6919	0.7812
RuvB-like 1	RUVBL1	-0.7326	3.9734	4.4010	0.6728	0.0060	0.0038

Protein S100-A11	S100A11	0.9266	-0.3448	-0.9699	0.5654	0.8352	0.5344
Protein S100-A16	S100A16	-0.7774	1.0547	1.5653	0.6478	0.4812	0.2935
Protein S100-A8	S100A8	1.3202	5.0198	4.0298	0.3809	0.0010	0.0070
Protein S100-A9	S100A9	3.5617	3.0883	0.6058	0.0128	0.0256	0.7208
Serum amyloid A-1 protein	SAA1	-7.6594	0.4712	5.6818	0.0000	0.7796	0.0005
Serum amyloid A-2 protein	SAA2	-9.1017	-0.6418	5.5715	0.0000	0.6919	0.0005
SUMO-activating enzyme subunit 1	SAE1	-0.8476	-1.6568	-1.0494	0.6097	0.2378	0.5043
Isoform 3 of Deoxynucleoside triphosphate triphosphohydrolase SAMHD1	SAMHD1	-2.2815	1.1145	2.6490	0.1060	0.4526	0.0631
Isoform 2 of GTP-binding protein SAR1a	SAR1A	-10.9643	-0.3053	7.1711	0.0000	0.8526	0.0000
SAP domain-containing ribonucleoprotein	SARNP	2.5313	5.5566	3.7317	0.0720	0.0004	0.0117
Suprabasin	SBSN	-4.1001	-0.5831	2.2212	0.0049	0.7182	0.1219
Somatomedin-B and thrombospondin type-1 domain-containing protein	SBSPON	0.9723	-3.2242	-3.8286	0.5441	0.0202	0.0099
Secretory carrier-associated membrane protein 3	SCAMP3	2.0661	4.5080	3.0190	0.1470	0.0024	0.0354
Lysosome membrane protein 2	SCARB2	-0.6675	1.7341	2.1576	0.7032	0.2133	0.1326
Isoform 2 of Sec1 family domain-containing protein 1	SCFD1	2.2928	1.4250	-0.1630	0.1044	0.3175	0.9236
Isoform 2 of Secernin-1	SCRN1	-1.4407	-1.2320	-0.2281	0.3318	0.3982	0.8970
Isoform 2 of Secernin-2	SCRN2	7.3231	5.2183	0.1344	0.0000	0.0007	0.9325
Isoform 2 of Syntenin-1	SDCBP	-8.7283	-2.3369	3.6525	0.0000	0.0898	0.0135
Cluster of Isoform 2 of Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	SDHA	-1.3306	6.2299	7.0243	0.3762	0.0002	0.0001
Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial	SDHB	-4.6993	-0.3308	2.8771	0.0016	0.8421	0.0438
Vesicle-trafficking protein SEC22b	SEC22B	-3.3246	5.3262	7.4956	0.0195	0.0006	0.0000
Cluster of Protein transport protein Sec23A	SEC23A	-3.7755	-1.8180	0.7873	0.0087	0.1938	0.6332
Protein transport protein Sec24C	SEC24C	-0.5300	-0.4217	-0.0529	0.7673	0.7997	0.9730
Protein transport protein Sec61 subunit alpha isoform 1	SEC61A1	2.3734	0.8042	-0.8275	0.0924	0.6085	0.6162
Methanethiol oxidase	SELENBP1	0.2468	-4.4245	-4.5129	0.8904	0.0028	0.0032
Semenogelin-1	SEMG1	-8.9927	0.1844	6.3086	0.0000	0.9060	0.0002
Semenogelin-2	SEMG2	-11.1420	-0.8382	6.7689	0.0000	0.5916	0.0001
Cluster of Isoform 2 of Septin-11	SEPTIN11	0.2733	-2.2636	-2.4090	0.8794	0.1000	0.0910
Cluster of Isoform 2 of Septin-2	SEPTIN2	-18.7971	-12.4535	0.5789	0.0000	0.0000	0.7328
Isoform 2 of Septin-7	SEPTIN7	-1.0121	-2.5885	-1.8522	0.5264	0.0601	0.2073
Cluster of Isoform 2 of Septin-9	SEPTIN9	0.1167	6.4006	6.2058	0.9493	0.0001	0.0002
Isoform 2 of Plasminogen activator inhibitor 1 RNA-binding protein	SERBP1	0.3514	-0.6085	-0.8370	0.8482	0.7081	0.6092

Alpha-1-antitrypsin	SERPINA1	1.1834	-1.1261	-1.9121	0.4402	0.4475	0.1911
Alpha-1-antichymotrypsin	SERPINA3	1.4907	-0.0253	-1.0406	0.3158	0.9858	0.5072
Cluster of Leukocyte elastase inhibitor	SERPINB1	-0.2412	-2.1679	-1.9645	0.8929	0.1158	0.1775
Isoform 2 of Serpin B12	SERPINB12	-3.9858	-2.5665	0.1956	0.0059	0.0620	0.9094
Serpin B6	SERPINB6	-0.8897	-1.8429	-1.2035	0.5872	0.1880	0.4365
Antithrombin-III	SERPINC1	1.9617	0.3665	-0.9769	0.1720	0.8268	0.5316
Heparin cofactor 2	SERPIND1	8.5443	5.8759	-0.0520	0.0000	0.0003	0.9730
Pigment epithelium-derived factor	SERPINF1	0.0637	1.1601	1.0957	0.9687	0.4309	0.4839
Isoform 2 of Alpha-2-antiplasmin	SERPINF2	8.9638	0.6811	-5.4390	0.0000	0.6709	0.0007
Isoform 2 of Plasma protease C1 inhibitor	SERPING1	-0.0765	8.2846	8.1874	0.9648	0.0000	0.0000
Serpin H1	SERPINH1	0.6425	-0.8582	-1.2805	0.7149	0.5828	0.4022
Splicing factor 3A subunit 1	SF3A1	-0.1349	-0.6153	-0.5123	0.9436	0.7052	0.7702
Splicing factor 3B subunit 1	SF3B1	0.7900	-0.4232	-0.9538	0.6401	0.7997	0.5431
Splicing factor 3B subunit 2	SF3B2	-3.6296	-0.7517	1.7349	0.0114	0.6402	0.2386
Splicing factor 3B subunit 3	SF3B3	0.0817	0.4776	0.4133	0.9634	0.7782	0.8142
Splicing factor 3B subunit 4	SF3B4	1.5287	-2.2492	-3.2503	0.3016	0.1021	0.0247
Splicing factor, proline- and glutamine-rich	SFPQ	-0.2826	-1.5103	-1.2905	0.8743	0.2864	0.3984
Sideroflexin-3	SFXN3	-10.6047	-0.9709	6.2725	0.0000	0.5241	0.0002
SH3 domain-binding glutamic acid-rich-like protein	SH3BGRL	1.2038	-0.7608	-1.5674	0.4332	0.6348	0.2934
SH3 domain-binding glutamic acid-rich-like protein 2	SH3BGRL2	-1.1902	-3.4120	-2.5395	0.4384	0.0147	0.0733
Isoform 2 of Endophilin-B1	SH3GLB1	1.8728	-2.1356	-3.3732	0.1926	0.1208	0.0201
SH3 and multiple ankyrin repeat domains protein 3	SHANK3	-1.6327	-1.5738	-0.4329	0.2674	0.2631	0.8041
Isoform 4 of Serine hydroxymethyltransferase, cytosolic	SHMT1	-12.2012	-9.6016	-1.1149	0.0000	0.0000	0.4746
Isoform 3 of Serine hydroxymethyltransferase, cytosolic	SHMT1	-10.9470	-6.0898	1.4790	0.0000	0.0002	0.3247
Isoform 2 of Serine hydroxymethyltransferase, mitochondrial	SHMT2	-7.2390	0.7726	5.6912	0.0000	0.6286	0.0005
Isoform 2 of S-phase kinase-associated protein 1	SKP1	-0.7348	-11.4265	10.7199	0.6718	0.0000	0.0000
Cluster of Isoform 2 of Calcium-binding mitochondrial carrier protein Aralar2	SLC25A13	-1.6128	-0.2651	0.8386	0.2718	0.8703	0.6086
Isoform B of Phosphate carrier protein, mitochondrial	SLC25A3	13.3341	0.2342	-8.8557	0.0000	0.8856	0.0000
Cluster of ADP/ATP translocase 2	SLC25A5	-0.1754	-3.0768	-2.9018	0.9286	0.0261	0.0421
Cluster of Isoform 3 of Solute carrier family 27 member 3	SLC27A3	0.9358	-0.0764	-0.7127	0.5611	0.9575	0.6617
Bile acyl-CoA synthetase	SLC27A5	-0.9451	-0.3778	0.2730	0.5585	0.8237	0.8827
Isoform 2 of Choline transporter-like protein 2	SLC44A2	-0.2732	0.4201	0.5986	0.8794	0.7997	0.7243

Band 3 anion transport protein	SLC4A1	-2.0314	-3.6491	-2.1992	0.1548	0.0102	0.1258
Na(+)/H(+) exchange regulatory cofactor NHE-RF1	SLC9A3R1	-1.5426	-5.1093	-3.9661	0.2977	0.0009	0.0078
Cluster of Isoform 2 of Na(+)/H(+) exchange regulatory cofactor NHE-RF2	SLC9A3R2	-3.9523	-3.3350	-0.5818	0.0063	0.0169	0.7311
Isoform 2 of STE20-like serine/threonine-protein kinase	SLK	-0.4091	-1.9184	-1.6050	0.8205	0.1679	0.2807
Structural maintenance of chromosomes protein 1A	SMC1A	0.3503	-0.5012	-0.7308	0.8485	0.7669	0.6559
Staphylococcal nuclease domain-containing protein 1	SND1	1.4130	0.4223	-0.5481	0.3419	0.7997	0.7489
U5 small nuclear ribonucleoprotein 200 kDa helicase	SNRNP200	-2.1622	-0.1343	1.3415	0.1267	0.9302	0.3778
Small nuclear ribonucleoprotein Sm D1	SNRPD1	-0.5041	-1.5117	-1.1410	0.7769	0.2861	0.4627
Small nuclear ribonucleoprotein Sm D3	SNRPD3	-1.6966	-0.4269	0.7368	0.2451	0.7991	0.6549
Cluster of Beta-1-syntrophin	SNTB1	2.4585	1.3518	-0.3477	0.0808	0.3491	0.8452
Beta-2-syntrophin	SNTB2	3.2072	-1.1222	-3.2873	0.0238	0.4493	0.0234
Cluster of Isoform 1A of Sorting nexin-1	SNX1	-6.7735	-0.2177	4.4016	0.0000	0.8923	0.0038
Sorting nexin-5	SNX5	7.2570	4.0073	-1.0097	0.0000	0.0057	0.5174
Isoform 4 of Superoxide dismutase [Mn], mitochondrial	SOD2	1.3899	5.2557	4.2139	0.3508	0.0007	0.0052
Cluster of Isoform 11 of Sorbin and SH3 domain-containing protein 2	SORBS2	-1.7731	2.5503	3.7125	0.2198	0.0634	0.0121
Vinexin	SORBS3	0.0911	0.8038	0.7273	0.9615	0.6085	0.6567
Sortilin	SORT1	4.8974	2.8502	-0.5382	0.0011	0.0393	0.7552
Cluster of Isoform 2 of C-Jun-amino-terminal kinase-interacting protein 4	SPAG9	0.5336	-1.7955	-2.1267	0.7673	0.1993	0.1389
Isoform 3 of SPATS2-like protein	SPATS2L	-0.4940	-1.6790	-1.3122	0.7785	0.2298	0.3883
Sepiapterin reductase	SPR	2.2072	2.6373	1.0858	0.1191	0.0558	0.4875
Isoform 2 of Spectrin alpha chain, erythrocytic 1	SPTA1	-3.0591	-1.9123	0.2066	0.0308	0.1693	0.9038
Cluster of Isoform 3 of Spectrin alpha chain, non-erythrocytic 1	SPTAN1	-0.2800	-3.1604	-2.9127	0.8758	0.0227	0.0415
Cluster of Isoform 2 of Spectrin beta chain, erythrocytic	SPTB	-5.1109	-1.7901	1.7247	0.0008	0.2003	0.2421
Cluster of Spectrin beta chain, non-erythrocytic 1	SPTBN1	-0.9336	-3.5027	-2.8034	0.5612	0.0128	0.0497
Sulfide:quinone oxidoreductase, mitochondrial	SQOR	1.1694	0.2687	-0.5330	0.4468	0.8680	0.7582
Sequestosome-1	SQSTM1	6.1260	3.4180	-0.8177	0.0001	0.0147	0.6202
Isoform 2 of Sorcin	SRI	-0.2931	-4.7328	-4.4477	0.8710	0.0017	0.0036
Signal recognition particle 14 kDa protein	SRP14	2.6606	7.8589	5.9044	0.0597	0.0000	0.0003
Signal recognition particle 9 kDa protein	SRP9	0.4535	5.9973	5.5802	0.8004	0.0002	0.0005

Isoform 2 of Serrate RNA effector molecule homolog	SRRT	-0.4827	-2.1572	-1.7894	0.7863	0.1178	0.2253
Serine/arginine-rich splicing factor 1	SRSF1	0.3419	0.1926	-0.0438	0.8507	0.9040	0.9771
Isoform 2 of Serine/arginine-rich splicing factor 10	SRSF10	1.2890	5.8022	4.8193	0.3933	0.0003	0.0019
Cluster of Serine/arginine-rich splicing factor 2	SRSF2	11.5821	0.1753	-7.7197	0.0000	0.9109	0.0000
Serine/arginine-rich splicing factor 3	SRSF3	1.2596	6.1527	5.1836	0.4057	0.0002	0.0010
Serine/arginine-rich splicing factor 7	SRSF7	2.3798	0.7404	-0.8945	0.0915	0.6452	0.5778
Lupus La protein	SSB	3.0111	-0.7272	-2.7657	0.0334	0.6504	0.0532
Single-stranded DNA-binding protein, mitochondrial	SSBP1	11.1479	7.4744	-0.2563	0.0000	0.0000	0.8859
Translocon-associated protein subunit alpha	SSR1	9.9302	-1.6038	-8.3412	0.0000	0.2549	0.0000
Translocon-associated protein subunit delta	SSR4	0.8481	9.8425	9.0873	0.6097	0.0000	0.0000
Hsc70-interacting protein	ST13	-0.1183	-3.5475	-3.4030	0.9493	0.0120	0.0194
Signal transducer and activator of transcription 1-alpha/beta	STAT1	2.5277	0.3973	-1.3322	0.0724	0.8141	0.3803
Isoform Del-701 of Signal transducer and activator of transcription 3	STAT3	3.5540	2.5314	0.0642	0.0129	0.0655	0.9674
Statherin	STATH	15.0103	9.5560	-0.8440	0.0000	0.0000	0.6075
Stromal interaction molecule 1	STIM1	2.2268	1.2185	-0.3208	0.1160	0.4035	0.8602
Isoform 2 of Stress-induced-phosphoprotein 1	STIP1	-0.6034	-1.7787	-1.3355	0.7358	0.2032	0.3798
Serine/threonine-protein kinase 10	STK10	-0.2249	2.5786	2.6854	0.9017	0.0609	0.0595
Serine/threonine-protein kinase 24	STK24	2.7913	1.0755	-0.8458	0.0479	0.4726	0.6067
Isoform 2 of Serine/threonine-protein kinase 25	STK25	0.1337	0.2498	0.1543	0.9439	0.8771	0.9252
Erythrocyte band 7 integral membrane protein	STOM	0.4217	-0.8048	-1.0776	0.8143	0.6085	0.4902
Stomatin-like protein 2, mitochondrial	STOML2	-0.1154	0.7040	0.7699	0.9493	0.6580	0.6395
Isoform 2 of Serine-threonine kinase receptor-associated protein	STRAP	1.8630	1.5989	0.3007	0.1951	0.2556	0.8738
Steryl-sulfatase	STS	5.1647	3.2311	-0.3462	0.0007	0.0200	0.8452
Isoform 2 of Syntaxin-7	STX7	-0.7267	-10.5895	-9.9035	0.6759	0.0000	0.0000
Isoform 2 of Syntaxin-binding protein 1	STXBP1	-1.3150	1.4378	2.3080	0.3825	0.3134	0.1048
Activated RNA polymerase II transcriptional coactivator p15	SUB1	0.9975	-2.4204	-3.0565	0.5324	0.0789	0.0331
Succinate--CoA ligase [GDP-forming] subunit beta, mitochondrial	SUCLG2	-1.0331	-3.1649	-2.4040	0.5162	0.0225	0.0913
Cluster of Sulfotransferase 1A1	SULT1A1	-0.4097	-6.2911	-5.8985	0.8205	0.0001	0.0003

Cluster of Isoform 5 of SUN domain-containing protein 1	SUN1	1.8731	0.8154	-0.4755	0.1926	0.6051	0.7812
Isoform 2 of SUN domain-containing protein 2	SUN2	-0.0698	-1.4652	-1.3913	0.9677	0.3048	0.3586
Isoform 2 of Heterogeneous nuclear ribonucleoprotein Q	SYNCRIP	0.5250	3.0157	2.6036	0.7697	0.0291	0.0677
Nesprin-1	SYNE1	-0.7545	-0.2728	0.2462	0.6608	0.8663	0.8888
Isoform 2 of Nesprin-2	SYNE2	-1.6544	-1.2247	-0.0753	0.2600	0.4012	0.9633
Cluster of Isoform 2 of Synaptopodin	SYNPO	-2.9756	-3.2646	-1.1782	0.0352	0.0191	0.4488
Cluster of Synaptopodin-2	SYNPO2	0.0090	0.0199	0.0134	0.9972	0.9880	0.9917
Isoform Short of TATA-binding protein-associated factor 2N	TAF15	8.3824	-0.1069	-5.8166	0.0000	0.9467	0.0004
Transgelin	TAGLN	-1.2263	0.9213	1.7403	0.4218	0.5484	0.2367
Isoform 2 of Transgelin-2	TAGLN2	-1.0022	-0.2143	0.4725	0.5306	0.8938	0.7818
Transaldolase	TALDO1	0.1512	-2.1942	-2.2577	0.9388	0.1118	0.1146
Antigen peptide transporter 1	TAP1	4.7973	8.1919	4.7755	0.0014	0.0000	0.0020
Cluster of TAR DNA-binding protein 43	TARDBP	2.9694	0.7021	-1.3338	0.0356	0.6583	0.3798
Isoform 2 of Threonine--tRNA ligase 1, cytoplasmic	TARS1	1.4240	0.3172	-0.6588	0.3382	0.8460	0.6912
Tax1-binding protein 3	TAX1BP3	11.7836	6.5926	-1.5554	0.0000	0.0001	0.2975
Isoform 2 of TBC1 domain family member 9B	TBC1D9B	-0.3189	0.5406	0.7481	0.8624	0.7418	0.6470
Tubulin-specific chaperone A	TBCA	15.1820	9.0223	-1.4851	0.0000	0.0000	0.3234
T-complex protein 1 subunit alpha	TCP1	0.8036	-2.4761	-2.9790	0.6339	0.0716	0.0381
Isoform 2 of Angiopoietin-1 receptor	TEK	5.5414	3.7576	-0.0859	0.0004	0.0086	0.9607
Methylcytosine dioxygenase TET1	TET1	2.5840	1.7108	-0.0808	0.0672	0.2206	0.9633
Serotransferrin	TF	1.7799	-2.3493	-3.5198	0.2182	0.0882	0.0166
Isoform 2 of Transforming growth factor beta-1-induced transcript 1 protein	TGFB111	-1.9532	-1.1326	0.2186	0.1735	0.4445	0.9013
Transforming growth factor-beta-induced protein ig-h3	TGFBI	0.6641	-0.7246	-1.1641	0.7032	0.6504	0.4526
Protein-glutamine gamma-glutamyltransferase 2	TGM2	2.4190	2.3812	0.6900	0.0866	0.0837	0.6726
Protein-glutamine gamma-glutamyltransferase E	TGM3	2.4639	3.0771	1.3428	0.0802	0.0261	0.3775
Thrombospondin-1	THBS1	1.0717	-0.5957	-1.3153	0.4988	0.7109	0.3870
Thrombospondin type-1 domain-containing protein 7A	THSD7A	-3.8943	-1.4686	1.2113	0.0070	0.3035	0.4332
Tubulointerstitial nephritis antigen	TINAG	-0.5970	-5.3601	-4.8568	0.7381	0.0006	0.0018
Cluster of Tubulointerstitial nephritis antigen-like	TINAGL1	0.3177	0.9971	0.7627	0.8624	0.5097	0.6422
Cluster of Tight junction protein ZO-1	TJP1	-3.2181	-4.2185	-1.9497	0.0234	0.0039	0.1817
Triokinase/FMN cyclase	TKFC	-4.9617	-1.9655	1.4508	0.0010	0.1569	0.3347
Isoform 2 of Transketolase	TKT	1.0478	-1.0703	-1.7650	0.5102	0.4739	0.2305

Cluster of Talin-1	TLN1	-0.7321	-1.7787	-1.2478	0.6728	0.2032	0.4181
Transmembrane emp24 domain-containing protein 2	TMED2	9.8907	6.1835	-0.6673	0.0000	0.0002	0.6868
Stimulator of interferon genes protein	TMEM173	4.5409	2.7734	-0.3707	0.0021	0.0449	0.8357
Transmembrane protein 43	TMEM43	10.9681	6.9765	-0.6228	0.0000	0.0001	0.7114
Tropomodulin-1	TMOD1	0.2501	4.3571	4.1082	0.8898	0.0031	0.0062
Tropomodulin-3	TMOD3	-1.3153	-3.4557	-2.4972	0.3825	0.0137	0.0786
Cluster of Lamina-associated polypeptide 2, isoforms beta/gamma	TMPO	8.0226	5.2087	-0.3516	0.0000	0.0007	0.8445
Thymosin beta-4	TMSB4X	0.2604	-1.8208	-1.9654	0.8852	0.1938	0.1775
Cluster of Isoform 4 of Tenascin	TNC	1.9606	0.9601	-0.3931	0.1721	0.5291	0.8256
182 kDa tankyrase-1-binding protein	TNKS1BP1	-1.2581	-1.7288	-0.8404	0.4057	0.2150	0.6085
Tensin-1	TNS1	-0.0865	-1.0650	-0.9869	0.9632	0.4755	0.5268
Isoform 4 of Tensin-2	TNS2	-1.0641	-4.3669	-3.5631	0.5027	0.0031	0.0156
Tensin-3	TNS3	-0.6989	-2.7039	-2.1790	0.6868	0.0500	0.1284
Toll-interacting protein	TOLLIP	7.0962	4.2473	-0.6645	0.0000	0.0037	0.6881
Isoform 5 of TOM1-like protein 2	TOM1L2	-3.3703	-3.2195	-0.8650	0.0179	0.0204	0.5978
Isoform 3 of Torsin-1A-interacting protein 1	TOR1AIP1	1.7905	2.7193	1.4502	0.2158	0.0486	0.3347
Isoform 3 of Tumor protein D52	TPD52	-2.3309	5.9951	7.4754	0.0989	0.0002	0.0000
Isoform 2 of Triosephosphate isomerase	TPI1	1.5625	-2.1943	-3.2195	0.2896	0.1118	0.0259
Isoform 5 of Tropomyosin alpha-1 chain	TPM1	0.1365	-1.0031	-1.0781	0.9430	0.5063	0.4902
Cluster of Isoform 2 of Tropomyosin alpha-3 chain	TPM3	-0.0457	-0.6514	-0.6085	0.9751	0.6880	0.7193
Tripeptidyl-peptidase 1	TPP1	0.1937	-0.7612	-0.8794	0.9192	0.6348	0.5883
Tubulin polymerization-promoting protein family member 3	TPPP3	-17.4048	-12.8974	-0.8056	0.0000	0.0000	0.6255
Nucleoprotein TPR	TPR	-1.4924	1.0441	2.0422	0.3158	0.4857	0.1578
Transformer-2 protein homolog alpha	TRA2A	10.2794	6.0201	-1.0926	0.0000	0.0002	0.4839
Isoform 3 of Transformer-2 protein homolog beta	TRA2B	0.5805	-0.6018	-0.9865	0.7438	0.7089	0.5268
Isoform Beta of E3 ubiquitin-protein ligase TRIM23	TRIM23	7.2391	3.3658	-1.6274	0.0000	0.0160	0.2744
E3 ubiquitin/ISG15 ligase TRIM25	TRIM25	3.0948	1.6368	-0.5014	0.0289	0.2440	0.7734
Transcription intermediary factor 1-beta	TRIM28	0.6719	-1.1352	-1.5726	0.7017	0.4435	0.2922
TSC22 domain family protein 1	TSC22D1	9.1469	-0.5675	-6.7898	0.0000	0.7246	0.0001
Thiosulfate sulfurtransferase	TST	12.7779	8.7206	-0.1433	0.0000	0.0000	0.9298
Transthyretin	TTR	4.8502	0.3711	-2.9404	0.0012	0.8259	0.0401
Cluster of Tubulin alpha-1B chain	TUBA1B	0.5730	-2.0419	-2.3956	0.7463	0.1380	0.0926
Cluster of Tubulin beta chain	TUBB	0.0784	-1.7633	-1.7849	0.9647	0.2069	0.2255
Elongation factor Tu, mitochondrial	TUFM	-0.4158	2.1495	2.3941	0.8183	0.1189	0.0926

Isoform 4 of Twinfilin-1	TWF1	-2.9682	3.7117	5.6673	0.0356	0.0092	0.0005
Twinfilin-2	TWF2	2.5664	1.5994	-0.1781	0.0685	0.2556	0.9180
Thioredoxin	TXN	0.3017	-3.8309	-3.9674	0.8708	0.0076	0.0078
Thioredoxin domain-containing protein 17	TXNDC17	0.5311	-0.1370	-0.4965	0.7673	0.9286	0.7743
Isoform 2 of Thioredoxin domain-containing protein 5	TXNDC5	-7.9683	-0.4313	5.0060	0.0000	0.7991	0.0014
Thioredoxin-like protein 1	TXNL1	6.3709	0.3240	-4.0229	0.0001	0.8449	0.0071
Cluster of Thioredoxin reductase 1, cytoplasmic	TXNRD1	-5.8755	-0.2709	3.7375	0.0002	0.8669	0.0116
Isoform 2 of Thymidine phosphorylase	TYMP	1.8199	1.2493	-0.0133	0.2083	0.3914	0.9917
Tyrosine-protein kinase receptor TYRO3	TYRO3	-3.7344	-0.2617	2.2876	0.0093	0.8711	0.1084
Isoform 2 of Splicing factor U2AF 65 kDa subunit	U2AF2	-2.6268	4.0295	5.7468	0.0627	0.0054	0.0004
Isoform 2 of Uveal autoantigen with coiled-coil domains and ankyrin repeats	UACA	1.1954	-0.4326	-1.2393	0.4361	0.7991	0.4209
Ubiquitin-like modifier-activating enzyme 1	UBA1	1.8033	-2.4075	-3.5929	0.2130	0.0804	0.0149
Isoform 2 of Ubiquitin-associated protein 2-like	UBAP2L	3.2235	1.7826	-0.4459	0.0232	0.2023	0.7961
Isoform 2 of Ubiquitin-conjugating enzyme E2 K	UBE2K	4.2460	2.3198	-0.6152	0.0037	0.0920	0.7150
Cluster of Isoform 3 of Ubiquitin-conjugating enzyme E2 L3	UBE2L3	-8.9207	-8.2456	-2.0186	0.0000	0.0000	0.1630
Ubiquitin-conjugating enzyme E2 N	UBE2N	-1.0065	-3.5037	-2.7548	0.5280	0.0128	0.0542
Cluster of Ubiquilin-4	UBQLN4	-11.5393	-2.4615	5.4455	0.0000	0.0735	0.0007
Isoform 2 of UBX domain-containing protein 1	UBXN1	6.7558	3.4572	-1.2084	0.0000	0.0137	0.4346
Ubiquitin carboxyl-terminal hydrolase isozyme L1	UCHL1	10.1611	6.5563	-0.4855	0.0000	0.0001	0.7795
Isoform 2 of E3 UFM1-protein ligase 1	UFL1	-2.5639	-0.2470	1.5045	0.0685	0.8785	0.3157
Ubiquitin-fold modifier 1	UFM1	-1.6475	-11.7516	10.4173	0.2614	0.0000	0.0000
UDP-glucose 6-dehydrogenase	UGDH	6.4837	3.2360	-1.2402	0.0001	0.0199	0.4209
Isoform 2 of UDP-glucose:glycoprotein glucosyltransferase 1	UGGT1	0.7535	1.5604	1.0189	0.6609	0.2673	0.5159
Isoform 2 of UTP--glucose-1-phosphate uridylyltransferase	UGP2	-6.7496	-0.0774	4.5231	0.0000	0.9575	0.0032
Cluster of UDP-glucuronosyltransferase 2B7	UGT2B7	-11.9495	0.2320	8.3700	0.0000	0.8861	0.0000
Isoform 4 of Uromodulin	UMOD	14.5006	9.4147	-0.6354	0.0000	0.0000	0.7047
Protein unc-45 homolog A	UNC45A	0.1479	-1.2874	-1.3650	0.9399	0.3772	0.3669
Cytochrome b-c1 complex subunit 1, mitochondrial	UQCRC1	0.3174	0.4994	0.2741	0.8624	0.7672	0.8827
Cytochrome b-c1 complex subunit 2, mitochondrial	UQCRC2	-0.3931	-0.2451	0.0272	0.8252	0.8794	0.9864

Isoform 2 of General vesicular transport factor p115	USO1	1.9509	-0.2087	-1.5342	0.1736	0.8954	0.3064
Ubiquitin carboxyl-terminal hydrolase 14	USP14	-1.2200	0.2055	1.0330	0.4248	0.8969	0.5094
Isoform Short of Ubiquitin carboxyl-terminal hydrolase 5	USP5	-1.0444	-0.8991	-0.1712	0.5121	0.5581	0.9223
Isoform 2 of Probable ubiquitin carboxyl-terminal hydrolase FAF-X	USP9X	0.0386	0.1325	0.1038	0.9788	0.9309	0.9527
Isoform 2 of Utrophin	UTRN	-0.8331	-3.6814	-3.0475	0.6182	0.0097	0.0335
Cluster of Vesicle-associated membrane protein 3	VAMP3	-2.7228	17.4890	19.0291	0.0536	0.0000	0.0000
Valine--tRNA ligase	VARS	1.4077	-0.6151	-1.5632	0.3444	0.7052	0.2941
Vasorin	VASN	0.1679	-2.6270	-2.6941	0.9306	0.0566	0.0586
Vasodilator-stimulated phosphoprotein	VASP	9.2910	5.1940	-1.2303	0.0000	0.0008	0.4244
Synaptic vesicle membrane protein VAT-1 homolog	VAT1	2.0787	0.3102	-1.1117	0.1447	0.8505	0.4758
Cluster of Isoform 1 of Vinculin	VCL	-1.2180	-2.0967	-1.2289	0.4256	0.1273	0.4244
Transitional endoplasmic reticulum ATPase	VCP	-0.0472	-2.1896	-2.1180	0.9748	0.1126	0.1407
Voltage-dependent anion-selective channel protein 1	VDAC1	2.4081	-0.5597	-2.1905	0.0881	0.7291	0.1271
Isoform 1 of Voltage-dependent anion-selective channel protein 2	VDAC2	0.6694	-3.1003	-3.5006	0.7031	0.0251	0.0171
Cluster of Vimentin	VIM	-0.7016	-1.9199	-1.4073	0.6868	0.1677	0.3533
Vacuolar protein sorting-associated protein 26B	VPS26B	3.6097	2.1423	-0.3559	0.0118	0.1199	0.8423
Vacuolar protein sorting-associated protein 35	VPS35	-0.3956	0.4286	0.6905	0.8251	0.7991	0.6726
Isoform 2 of Vacuolar protein sorting-associated protein 52 homolog	VPS52	0.6212	-1.0513	-1.4556	0.7284	0.4823	0.3336
Vitronectin	VTN	1.0914	0.9748	0.2136	0.4868	0.5222	0.9027
von Willebrand factor A domain-containing protein 1	VWA1	1.1862	-2.0900	-2.8606	0.4400	0.1282	0.0448
von Willebrand factor	VWF	-2.9410	0.2189	2.2189	0.0374	0.8920	0.1221
Tryptophan--tRNA ligase, cytoplasmic	WARS	0.8191	-1.9624	-2.4851	0.6243	0.1575	0.0802
Wiskott-Aldrich syndrome protein family member 2	WASF2	-0.6570	0.9592	1.3895	0.7075	0.5291	0.3588
WD repeat-containing protein 1	WDR1	0.1087	-1.1662	-1.2193	0.9526	0.4280	0.4291
Skin-specific protein 32	XP32	-20.8516	-0.2834	13.9296	0.0000	0.8619	0.0000
Isoform 3 of Xaa-Pro aminopeptidase 1	XPNPEP1	-0.7765	-4.7186	-4.1044	0.6479	0.0017	0.0062
Exportin-7	XPO7	0.6469	1.2841	0.8201	0.7119	0.3779	0.6196
X-ray repair cross-complementing protein 5	XRCC5	1.7141	0.3922	-0.7828	0.2388	0.8170	0.6349
X-ray repair cross-complementing protein 6	XRCC6	2.4830	-0.6267	-2.3072	0.0782	0.7002	0.1048
Y-box-binding protein 1	YBX1	0.4901	0.7032	0.3566	0.7811	0.6580	0.8423
Y-box-binding protein 2	YBX2	-13.0370	-9.0817	-0.0348	0.0000	0.0000	0.9811

Isoform 2 of Y-box-binding protein 3	YBX3	-1.0402	8.5390	9.0938	0.5122	0.0000	0.0000
Isoform 1 of YLP motif-containing protein 1	YLPM1	-0.5958	-1.2847	-0.8556	0.7383	0.3779	0.6021
Isoform Short of 14-3-3 protein beta/alpha	YWHAB	2.2573	-1.9701	-3.4727	0.1101	0.1560	0.0178
14-3-3 protein epsilon	YWHAE	1.5628	-2.4868	-3.5068	0.2896	0.0704	0.0169
14-3-3 protein gamma	YWHAG	0.8059	-2.5900	-3.0925	0.6330	0.0600	0.0312
14-3-3 protein eta	YWHAH	2.6409	-0.6005	-2.3892	0.0615	0.7089	0.0931
14-3-3 protein theta	YWHAQ	1.8926	-0.0927	-1.3806	0.1894	0.9509	0.3607
14-3-3 protein zeta/delta	YWHAZ	1.6287	-2.0463	-3.1192	0.2684	0.1373	0.0301
Zymogen granule protein 16 homolog B	ZG16B	12.8997	9.1917	0.2365	0.0000	0.0000	0.8948
Cluster of Isoform 6 of Zinc finger protein 185	ZNF185	-3.3623	-1.4401	0.8768	0.0182	0.3130	0.5897
Zyxin	ZYX	-0.1939	-0.7790	-0.6329	0.9192	0.6253	0.7062

Supplemental Table 2. Gene Names of Glomerular ECM Proteins Identified in NC, FSGS-NOS, and cFSGS		
Normal	cFSGS	FSGS-NOS
A2M	A2M	A2M
AGRN	AGRN	AGRN
AGT	AGT	AGT
ALB	ALB	ALB
AMBP	AMBP	AMBP
ANGPTL6	ANGPTL6	ANGPTL6
ANXA1	ANXA1	ANXA1
ANXA11	ANXA11	ANXA11
ANXA2	ANXA2	ANXA2
ANXA4	ANXA3	ANXA4
ANXA5	ANXA4	ANXA5
ANXA6	ANXA5	ANXA6
APCS	ANXA6	ANXA7
APOA1	ANXA7	APCS
APOA4	APCS	APOA1
APOE	APOA1	APOA4
C1QA	APOA4	APOE
C1QB	APOC3	BGN
C1QC	APOE	C1QA
C3	AZU1	C1QB
C5	C1QA	C1QC
C6	C1QB	C3
C7	C1QC	C5
C8A	C3	C6
C8G	C5	C7
C9	C6	C8A
CFHR5	C7	C8B
CLU	C8A	C8G
COL18A1	C8B	C9
COL1A1	C8G	CFHR5
COL1A2	C9	CLU
COL3A1	CFHR5	COL12A1
COL4A1	CLU	COL15A1
COL4A2	COL12A1	COL18A1
COL4A3	COL15A1	COL1A1
COL4A4	COL18A1	COL1A2
COL4A5	COL1A1	COL2A1
COL6A1	COL1A2	COL3A1

COL6A2	COL2A1	COL4A1
COL6A3	COL3A1	COL4A2
COPA	COL4A1	COL4A3
CSTB	COL4A2	COL4A4
CTSD	COL4A3	COL4A5
CTSZ	COL4A4	COL6A1
EMILIN1	COL4A5	COL6A2
F2	COL6A1	COL6A3
F9	COL6A2	COL7A1
FBLN1	COL6A3	COPA
FBN1	COL7A1	CSTA
FGA	COPA	CSTB
FGB	CRIM1	CTSD
FGF1	CSPG4	CTSZ
FGG	CSTA	DCD
FN1	CSTB	DST
GNAS	CTSC	EFEMP1
GPI	CTSD	EMILIN1
GPX3	CTSG	F2
GSN	CTSZ	F9
HP	DCD	FBLN1
HPX	ECM1	FBLN5
HRG	EFEMP1	FBN1
HRNR	ELANE	FGA
HSD17B12	EMILIN1	FGB
HSPG2	F12	FGF1
IGHG4	F2	FGG
ITIH1	F9	FLG2
ITIH2	FBLN1	FN1
ITIH4	FBLN5	GNAS
LAMA2	FBN1	GPI
LAMA5	FBN2	GPX3
LAMB1	FGA	GSN
LAMB2	FGB	HP
LAMC1	FGF1	HPX
LGALS1	FGG	HRG
LGALS3BP	FLG2	HRNR
LUM	FN1	HSD17B12
LYZ	GNAS	HSPG2
MMRN2	GPI	HTRA1
MPO	GPX3	IGHG4
NID1	GSN	ITIH1
NID2	HP	ITIH2

NPNT	HPX	ITIH4
PAPLN	HRG	LAMA2
PEBP1	HRNR	LAMA5
PLG	HSD17B12	LAMB1
POSTN	HSPG2	LAMB2
PPIA	IGFALS	LAMC1
RBP4	IGFBP7	LGALS1
S100A11	IGHG4	LGALS3BP
SBSPON	ITIH1	LPA
SERPINA1	ITIH2	LRG1
SERPINA3	ITIH4	LRP2
SERPINB1	ITIH5	LUM
SERPINB12	KNG1	LYZ
SERPINB6	LAMA2	MFGE8
SERPINC1	LAMA4	MMRN2
SERPINF1	LAMA5	MPO
SERPINF2	LAMB1	NID1
SERPINH1	LAMB2	NID2
TGFBI	LAMC1	NPNT
TGM2	LGALS1	NTN4
THBS1	LGALS3	PAPLN
TINAG	LGALS3BP	PEBP1
TINAGL1	LGALS7	PLG
TNC	LMAN1	POSTN
TTR	LPA	PPIA
VTN	LRG1	PRG2
VWA1	LUM	PXDN
VWF	LYZ	RBP4
	MFGE8	S100A11
	MMRN2	S100A16
	MPO	S100A8
	NID1	SAA1
	NID2	SBSPON
	NPNT	SERPINA1
	PAPLN	SERPINA3
	PEBP1	SERPINB1
	PLG	SERPINB12
	PLOD3	SERPINB6
	POSTN	SERPINC1
	PPIA	SERPINF1
	PRG2	SERPINF2
	PRG3	SERPING1
	PRSS23	SERPINH1

	PXDN	TGFBI
	RBP4	TGM2
	S100A11	TGM3
	S100A16	THBS1
	S100A8	TINAG
	S100A9	TINAGL1
	SBSPON	TNC
	SERPINA1	TTR
	SERPINA3	VTN
	SERPINB1	VWA1
	SERPINB12	VWF
	SERPINB6	
	SERPINC1	
	SERPIND1	
	SERPINF1	
	SERPINF2	
	SERPING1	
	SERPINH1	
	TGFBI	
	TGM2	
	TGM3	
	THBS1	
	TINAG	
	TINAGL1	
	TNC	
	TTR	
	VTN	
	UMOD	
	VWA1	
	VWF	

Supplemental Table 3. Relative Abundance of Glomerular ECM Proteins						
Core Basement Membrane Matrisome						
Protein	Gene	Matrisome Category	Fold change cFSGS: NC	log2FC	Fold change NOS: NC	Log2FC
Collagen alpha-1(XV)	COL15A1	Collagens	>10	>4.0	>10	>4.0
Collagen alpha-1(XVIII)	COL18A1	Collagens	1.8	0.8	1.5	0.58
Collagen alpha-1(II)	COL2A1	Collagens	>10	>4.0	>10	>4.0
Collagen alpha-1 (III)	COL3A1	Collagens	1.8	0.8	5.3	2.41
Collagen alpha-1 (IV)	COL4A1	Collagens	1.0	0.0	1.8	0.85
Collagen alpha-2 (IV)	COL4A2	Collagens	1.4	0.5	2.4	1.26
Collagen alpha-3 (IV)	COL4A3	Collagens	1.4	0.5	1.4	0.49
Collagen alpha-4 (IV)	COL4A4	Collagens	1.3	0.4	1.1	0.14
Collagen alpha-5 (IV)	COL4A5	Collagens	1.0	0.0	0.8	0.32
Collagen alpha-1 (VII)	COL7A1	Collagens	>10	>4.0	>10	>4.0
Agrin	AGRN	ECM Glycoproteins	1.2	0.3	1.2	0.26
EGF-containing fibulin-like extracellular matrix protein 1	EFEMP1	ECM Glycoproteins	>10	>4.0	>10	>4.0
Fibulin-1	FBLN1	ECM Glycoproteins	0.8	-0.3	1.5	0.58
Fibrillin-1	FBN1	ECM Glycoproteins	0.8	-0.3	0.8	0.32
Fibronectin	FN1	ECM Glycoproteins	1.6	0.7	1.5	0.58
Laminin subunit alpha-2	LAMA2	ECM Glycoproteins	5.3	2.4	0.6	0.74
Laminin subunit alpha-4	LAMA4	ECM Glycoproteins	>10	>4.0	1.0	0.00
Laminin subunit alpha-5	LAMA5	ECM Glycoproteins	1.0	0.0	0.9	0.15
Laminin subunit beta-1	LAMB1	ECM Glycoproteins	3.6	1.8	1.0	0.00
Laminin subunit beta-2	LAMB2	ECM Glycoproteins	1.1	0.1	1.1	0.14

Laminin subunit gamma-1	LAMC1	ECM Glycoproteins	1.2	0.3	1.0	0.00
Multimerin-2	MMRN2	ECM Glycoproteins	0.4	-1.3	0.4	1.30
Nidogen-1	NID1	ECM Glycoproteins	1.1	0.1	1.1	0.14
Nidogen-2	NID2	ECM Glycoproteins	1.0	0.0	1.0	0.00
Nephronectin	NPNT	ECM Glycoproteins	1.1	0.1	2.4	1.26
Netrin-4	NTN4	ECM Glycoproteins	1.0	0.0	1.0	0.00
Papilin	PAPLN	ECM Glycoproteins	0.5	-1.0	0.9	0.15
Transforming growth factor-beta-induced protein ig-h3	TGFBI	ECM Glycoproteins	0.8	-0.3	0.8	0.32
Tenascin	TNC	ECM Glycoproteins	2.6	1.4	1.6	0.68
von Willebrand factor A domain-containing protein 1	VWA1	ECM Glycoproteins	0.8	-0.3	0.8	0.32
Basement membrane-specific heparan sulfate proteoglycan core protein	HSPG2	Proteoglycans	1.0	0.0	1.0	0.00
Core Structural Matrisome						
Collagen alpha-1 (XII)	COL12A1	Collagens	>10	>4.0	>10	>4.0
Collagen alpha-1 (I)	COL1A1	Collagens	1.3	0.4	6.9	2.79
Collagen alpha-1 (I)	COL1A2	Collagens	1.8	0.8	9.5	3.25
Collagen alpha-1 (VI)	COL6A1	Collagens	0.8	-0.3	1.1	0.14
Collagen alpha-2 (VI)	COL6A2	Collagens	0.8	-0.3	1.2	0.26
Collagen alpha-3 (VI)	COL6A3	Collagens	0.8	-0.3	1.2	0.26
Cysteine-rich motor neuron 1 protein	CRIM1	ECM Glycoproteins	>10	>4.0	1.0	0.00
Extracellular matrix protein 1	ECM1	ECM Glycoproteins	>10	>4.0	1.0	0.00
Elastin microfibril interfacier 1	EMILIN1	ECM Glycoproteins	2.6	1.4	3.3	1.72
Fibulin-5	FBLN5	ECM Glycoproteins	>10	>4.0	>10	>4.0

Fibrillin-2	FBN2	ECM Glycoproteins	>10	>4.0	1.0	0.00
Fibrinogen alpha chain	FGA	ECM Glycoproteins	1.0	0.0	3.0	1.58
Fibrinogen beta chain	FGB	ECM Glycoproteins	0.9	-0.2	2.0	1.00
Fibrinogen gamma chain	FGG	ECM Glycoproteins	0.8	-0.3	1.4	0.49
Insulin-like growth factor-binding protein complex acid labile subunit	IGFALS	ECM Glycoproteins	>10	>4.0	1.0	0.00
Insulin-like growth factor-binding protein 7	IGFBP7	ECM Glycoproteins	>10	>4.0	1.0	0.00
Leucine-rich alpha-2-glycoprotein	LRG1	ECM Glycoproteins	>10	>4.0	>10	>4.0
Lactadherin	MFGE8	ECM Glycoproteins	>10	>4.0	>10	>4.0
Periostin	POSTN	ECM Glycoproteins	7.3	2.9	6.3	2.66
Peroxidasin	PXDN	ECM Glycoproteins	>10	>4.0	>10	>4.0
Somatomedin-B and thrombospondin type-1 domain-containing protein	SBSPON	ECM Glycoproteins	0.4	-1.3	0.4	1.32
Thrombospondin-1	THBS1	ECM Glycoproteins	1.0	0.0	0.8	0.32
Tubulointerstitial nephritis antigen-like	TINAGL1	ECM Glycoproteins	1.4	0.5	1.6	0.68
Uromodulin	UMOD	ECM Glycoproteins	>10	>4.0	1.0	0.00
Vitronectin	VTN	ECM Glycoproteins	2.3	1.2	2.0	1.00
von Willebrand factor	VWF	ECM Glycoproteins	7.0	2.8	>10	>4.0
Biglycan	BGN	Proteoglycans	1.0	0.0	>10	>4.0
Lumican	LUM	Proteoglycans	0.3	-1.7	1.8	0.85
Proteoglycan 2	PRG2	Proteoglycans	>10	>4.0	>10	>4.0
Proteoglycan 3	PRG3	Proteoglycans	>10	>4.0	1.0	0.00

Matrisome Associated						
Alpha-2-macroglobulin	A2M	ECM Regulators	0.7	-0.5	0.5	1.00
Angiotensinogen	AGT	ECM Regulators	1.8	0.8	0.7	0.51
Alpha-1-microglobulin/bikunin precursor	AMBP	ECM Regulators	4.7	2.2	7.4	2.89
Angiopietin-related protein 6	ANGPTL6	ECM Regulators	0.9	-0.2	1.0	0.00
Azurocidin	AZU1	ECM Regulators	>10	>4.0	1.0	0.00
Cystatin-A	CSTA	ECM Regulators	>10	>4.0	>10	>4.0
Cystatin-B	CSTB	ECM Regulators	0.4	-1.3	0.4	1.32
Cathepsin B	CTSB	ECM Regulators	>10	>4.0	1.5	0.58
Cathepsin C	CTSC	ECM Regulators	>10	>4.0	1.0	0.00
Cathepsin D	CTSD	ECM Regulators	1.2	0.3	3.0	1.58
Cathepsin G	CTSG	ECM Regulators	>10	>4.0	1.0	0.00
Cathepsin Z	CTSZ	ECM Regulators	2.5	1.3	2.1	1.07
Neutrophil elastase	ELANE	ECM Regulators	>10	>4.0	1.0	0.00
Coagulation factor XII	F12	ECM Regulators	>10	>4.0	1.0	0.00
Prothrombin	F2	ECM Regulators	2.2	1.1	1.0	0.00
Coagulation factor IX	F9	ECM Regulators	2.2	1.1	2.3	1.20
Histidine-rich glycoprotein	HRG	ECM Regulators	0.7	-0.5	0.9	0.15
HtrA serine peptidase 1	HTRA1	ECM Regulators	1.0	0.0	>10	>4.0
Inter-alpha-trypsin inhibitor heavy chain H1	ITIH1	ECM Regulators	1.4	0.5	0.7	0.51

Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	ECM Regulators	1.0	0.0	0.6	0.74
Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	ECM Regulators	0.6	-0.7	3.0	1.58
Inter-alpha-trypsin inhibitor heavy chain H5	ITIH5	ECM Regulators	>10	>4.0	1.0	0.00
Kininogen-1	KNG1	ECM Regulators	>10	>4.0	1.0	0.00
Apolipoprotein(a)	LPA	ECM Regulators	>10	>4.0	>10	>4.0
Myeloperoxidase	MPO	ECM Regulators	>10	>4.0	7.9	2.98
Plasminogen	PLG	ECM Regulators	8.7	3.1	4.6	2.20
Procollagen-lysine,2-oxoglutarate 5-dioxygenase 3	PLOD3	ECM Regulators	>10	>4.0	1.0	0.00
Serine protease 23	PRSS23	ECM Regulators	>10	>4.0	1.0	0.00
Serum amyloid A-1 protein	SAA1	ECM Regulators	1.0	0.0	>10	>4.0
Serpin family A member 1	SERPINA1	ECM Regulators	0.6	-0.7	1.1	0.14
Serpin family A member 3	SERPINA3	ECM Regulators	1.4	0.5	2.2	1.14
Serpin family B member 1	SERPINB1	ECM Regulators	0.5	-1.0	0.8	0.32
Serpin family B member 12	SERPINB1 2	ECM Regulators	0.5	-1.0	1.1	0.14
Serpin family B member 6	SERPINB6	ECM Regulators	0.4	-1.3	1.4	0.49
Serpin family C member 1	SERPINC1	ECM Regulators	2.0	1.0	1.2	0.26
Serpin family D member 1	SERPIND1	ECM Regulators	>10	>4.0	1.0	0.00
Serpin family F member 1	SERPINF1	ECM Regulators	1.1	0.1	1.5	0.58
Serpin family F member 2	SERPINF2	ECM Regulators	1.4	0.5	<0.1	>4.0
Serpin family G member 1	SERPING1	ECM Regulators	>10	>4.0	>10	>4.0

Serpin family H member 1	SERPINH1	ECM Regulators	0.9	-0.2	0.8	0.32
Transglutaminase 2	TGM2	ECM Regulators	2.7	1.4	2.0	1.00
Transglutaminase 3	TGM3	ECM Regulators	>10	>4.0	>10	>4.0
Transthyretin	TTR	ECM Regulators	1.8	0.8	0.3	1.74
Annexin A1	ANXA1	ECM-affiliated Proteins	2.1	1.1	2.9	1.54
Annexin A11	ANXA11	ECM-affiliated Proteins	0.9	-0.2	1.5	0.58
Annexin A2	ANXA2	ECM-affiliated Proteins	1.1	0.1	1.2	0.26
Annexin A3	ANXA3	ECM-affiliated Proteins	>10	>4.0	1.0	0.00
Annexin A4	ANXA4	ECM-affiliated Proteins	2.1	1.1	2.5	1.32
Annexin A5	ANXA5	ECM-affiliated Proteins	1.0	0.0	1.0	0.00
Annexin A6	ANXA6	ECM-affiliated Proteins	1.2	0.3	1.5	0.58
Annexin A7	ANXA7	ECM-affiliated Proteins	>10	>4.0	>10	>4.0
Serum amyloid P-component	APCS	ECM-affiliated Proteins	8.3	3.1	8.4	3.07
Apolipoprotein A-I	APOA1	ECM-affiliated Proteins	0.6	-0.7	0.8	0.32
Apolipoprotein A-IV	APOA4	ECM-affiliated Proteins	2.7	1.4	5.2	2.38
Apolipoprotein C-III	APOC3	ECM-affiliated Proteins	1.0	0.0	1.0	0.00
Apolipoprotein E	APOE	ECM-affiliated Proteins	2.4	1.3	2.9	1.54
Complement C1q subcomponent subunit A	C1QA	ECM-affiliated Proteins	0.2	-2.3	<0.1	>4.0
Complement C1q subcomponent subunit B	C1QB	ECM-affiliated Proteins	2.1	1.1	<0.1	>4.0
Complement C1q subcomponent subunit C	C1QC	ECM-affiliated Proteins	1.2	0.3	<0.1	>4.0

Complement C3	C3	ECM-affiliated Proteins	1.4	0.5	0.9	0.15
Complement C5	C5	ECM-affiliated Proteins	>10	>4.0	>10	>4.0
Complement C6	C6	ECM-affiliated Proteins	>10	>4.0	>10	>4.0
Complement C7	C7	ECM-affiliated Proteins	>10	>4.0	>10	>4.0
Complement component C8 alpha chain	C8A	ECM-affiliated Proteins	>10	>4.0	>10	>4.0
Complement component C8 beta chain	C8B	ECM-affiliated Proteins	>10	>4.0	>10	>4.0
Complement component C8 gamma chain	C8G	ECM-affiliated Proteins	>10	>4.0	7.8	2.96
Complement component C9	C9	ECM-affiliated Proteins	3.8	1.9	3.8	1.93
Complement factor H-related protein 5	CFHR5	ECM-affiliated Proteins	0.5	-1.0	0.5	1.00
Clusterin	CLU	ECM-affiliated Proteins	2.3	1.2	2.5	1.32
Coatomer subunit alpha	COPA	ECM-affiliated Proteins	2.1	1.1	0.9	0.15
Chondroitin sulfate proteoglycan 4	CSPG4	ECM-affiliated Proteins	>10	>4.0	1.0	0.00
Dermcidin	DCD	ECM-affiliated Proteins	>10	>4.0	>10	>4.0
Dystonin	DST	ECM-affiliated Proteins	1.0	0.0	>10	>4.0
Guanine nucleotide-binding protein G(s) subunit alpha isoforms XLas	GNAS	ECM-affiliated Proteins	0.4	-1.3	0.5	1.00
Glucose-6-phosphate isomerase	GPI	ECM-affiliated Proteins	0.4	-1.3	0.5	1.00
Glutathione peroxidase 3	GPX3	ECM-affiliated Proteins	<0.1	>4.0	0.4	1.32
Gelsolin	GSN	ECM-affiliated Proteins	0.5	-1.0	0.6	0.74
Haptoglobin	HP	ECM-affiliated Proteins	1.6	0.7	1.6	0.68
Hemopexin	HPX	ECM-affiliated Proteins	0.6	-0.7	0.5	1.00

Very-long-chain 3-oxoacyl-CoA reductase	HSD17B12	ECM-affiliated Proteins	0.4	-1.3	<0.1	>4.0
Ig gamma-4 chain C region	IGHG4	ECM-affiliated Proteins	0.3	-1.7	0.4	1.32
Galectin-1	LGALS1	ECM-affiliated Proteins	1.2	0.3	1.5	0.58
Galectin-3	LGALS3	ECM-affiliated Proteins	>10	>4.0	1.0	0.00
Galectin-7	LGALS7	ECM-affiliated Proteins	>10	>4.0	1.0	0.00
Lectin, mannose binding 1	LMAN1	ECM-affiliated Proteins	>10	>4.0	1.0	0.00
Low-density lipoprotein receptor-related protein 2	LRP2	ECM-affiliated Proteins	1.0	0.0	>10	>4.0
Lysozyme C	LYZ	ECM-affiliated Proteins	0.4	-1.3	0.2	2.32
Phosphatidylethanolamine-binding protein 1	PEBP1	ECM-affiliated Proteins	0.3	-1.7	0.6	0.74
Peptidyl-prolyl cis-trans isomerase A	PPIA	ECM-affiliated Proteins	0.5	-1.0	0.7	0.51
Retinol-binding protein 4	RBP4	ECM-affiliated Proteins	2.0	1.0	0.8	0.32
Fibroblast growth factor 1	FGF1	Secreted Factors	0.4	-1.3	<0.1	>4.0
Filaggrin-2	FLG2	Secreted Factors	>10	>4.0	>10	>4.0
Hornerin	HRNR	Secreted Factors	1.6	0.7	0.5	1.00
S100 calcium binding protein A11	S100A11	Secreted Factors	0.5	-1.0	0.4	1.32
S100 calcium binding protein A16	S100A16	Secreted Factors	>10	>4.0	>10	>4.0
S100 calcium binding protein A8	S100A8	Secreted Factors	>10	>4.0	>10	>4.0
S100 calcium binding protein A9	S100A9	Secreted Factors	>10	>4.0	1.0	0.00

Supplemental Table 4. Glomerular Cathepsin and Annexin A3 Staining of Various Diseases

Cathepsin C

Diagnosis	# Patients	# glomeruli (range/patient)	#(%) PEC staining	# patients	#(%) PEC Hypertrophy/Proliferation	# patients	#(%) Tuft staining	# patients	Tuft staining area (%)
cFSGS	8	119 (4-34)	111 (93%)	8	75 (63%)	8	47 (51 ± 10%)	8	13.7 ± 3.1
FSGS-NOS	8	57 (4-14)	47 (82%)	8	21 (37%)	5	4 (10 ± 4%)	4	5.4 ± 2.2
FSGS TIP lesion	7	110 (4-34)	110 (100%)	7	69 (63%)	7	20 (19 ± 7%)	6	7.6 ± 1.9
FSGS perihilar	6	70 (4-20)	63 (90%)	6	25 (36%)	5	7 (9 ± 4%)	3	6.9 ± 2.0
MCD	9	87 (4-17)	83 (95%)	9	34 (39%)	8	0	0	
MN	9	97 (4-14)	87 (90%)	7	39 (40%)	7	6 (10 ± 7%)	2	
NC	6	75 (7-26)	69 (92%)	6	8 (11%)	2	0	0	

Annexin A3

cFSGS	8	114 (6-33)	84 (74%)	8	59 (52%)	8	26 (29 ± 9%)	8	14.4 ± 2.8
FSGS-NOS	9	52 (4-13)	46 (88%)	9	30 (58%)	7	0	0	0
FSGS TIP lesion	7	107 (7-37)	99 (92%)	7	52 (48%)	7	5 (9 ± 3%)	1	4.2 ± 1.1
FSGS perihilar	6	80 (6-22)	68 (85%)	6	34 (42%)	6	7 (9 ± 5%)	3	7.9 ± 5.6
MCD	8	91 (4-24)	85 (93%)	8	35 (38%)	8	1 (2 ± 2%)	1	
MN	9	111 (6-25)	106 (95%)	9	53 (48%)	9	3 (3 ± 3%)	2	
NC	8	117 (4-35)	112 (96%)	8	32 (27%)	8	0	0	

Supplemental Table 5. Comparison of Urinary Excretion of ECM Proteins			
Protein	Gene	log2FC cFSGS: FSGS- NOS	q-value
ECM Proteins More Abundant in cFSGS Urine			
Syndecan-4	SDC4	6.37	9.97E-08
Apolipoprotein(a)	LPA	6.09	1.07E-06
Matrix metalloproteinase-9	MMP9	6.09	2.83E-05
Laminin subunit alpha-3	LAMA3	5.94	2.79E-06
Fibulin-7	FBLN7	5.91	3.41E-07
Insulin-like growth factor-binding protein 7	IGFBP7	5.90	9.97E-08
Latent-transforming growth factor beta-binding protein 4	LTBP4	5.86	7.78E-08
Hemicentin-1	HMCN1	5.46	1.93E-07
Epidermal growth factor	EGF	5.42	9.82E-06
Secreted frizzled-related protein 4	SFRP4	5.39	9.97E-08
Macrophage colony-stimulating factor 1	CSF1	5.34	2.02E-06
C-type lectin domain family 14 member A	CLEC14A	5.20	2.42E-06
Fibrillin-1	FBN1	5.19	2.66E-07
Cathepsin B	CTSB	5.09	4.84E-06
Collagen alpha-2(I) chain	COL1A2	5.00	2.83E-05
Chondroitin sulfate proteoglycan 4	CSPG4	4.95	2.02E-06
Multiple epidermal growth factor-like domains protein 8	MEGF8	4.95	8.80E-06
Semaphorin-5A	SEMA5A	4.90	1.21E-04
Brevican core protein	BCAN	4.83	3.76E-05
Stromal cell-derived factor 1	CXCL12	4.75	2.42E-06
Serine protease HTRA1	HTRA1	4.74	5.66E-04
Growth/differentiation factor 15	GDF15	4.66	4.84E-06
Collagen alpha-2(VI) chain	COL6A2	4.62	5.17E-07
Mucin-like protein 1	MUCL1	4.60	2.94E-04
Basement membrane-specific heparan sulfate proteoglycan core protein	HSPG2	4.58	4.82E-07
Hemicentin-2	HMCN2	4.57	3.57E-07
Galectin-9	LGALS9	4.47	3.35E-04
ADAMTS-like protein 2	ADAMTSL2	4.46	1.57E-04
Collagen alpha-1(VI) chain	COL6A1	4.41	6.19E-06
Thrombospondin-1	THBS1	4.36	3.05E-06
Cartilage intermediate layer protein 1	CILP	4.32	3.41E-07
Fibulin-5	FBLN5	4.25	4.84E-06
Agrin	AGRN	4.14	7.10E-04
Cartilage intermediate layer protein 2	CILP2	4.10	2.02E-06

Collagen alpha-1(XV) chain	COL15A1	3.97	6.53E-05
Fibronectin	FN1	3.94	2.42E-06
Latent-transforming growth factor beta-binding protein 1	LTBP1	3.93	5.71E-03
Protein S100-A6	S100A6	3.85	2.02E-04
Thrombospondin-4	THBS4	3.82	4.84E-06
Protein S100-A11	S100A11	3.61	8.72E-04
Follistatin-related protein 1	FSTL1	3.60	1.08E-04
C-C motif chemokine 25	CCL25	3.59	1.67E-03
Dermatopontin	DPT	3.58	2.83E-05
Fibulin-1	FBLN1	3.57	3.65E-05
Mucin-1	MUC1	3.57	1.32E-04
Collagen alpha-1(I) chain	COL1A1	3.52	9.38E-04
Fibulin-2	FBLN2	3.50	7.10E-04
Lithostathine-1-alpha	REG1A	3.50	4.13E-03
Collagen alpha-2(IV) chain	COL4A2	3.50	2.02E-06
Kininogen-1	KNG1	3.50	8.80E-06
Extracellular sulfatase Sulf-2	SULF2	3.48	1.73E-03
Neuroserpin	SERPINI1	3.47	8.54E-06
EGF-containing fibulin-like extracellular matrix protein 1	EFEMP1	3.46	1.78E-05
Urokinase-type plasminogen activator	PLAU	3.46	1.11E-03
Cathepsin L1	CTSL	3.45	2.90E-06
Bone marrow proteoglycan	PRG2	3.32	2.83E-05
Angiopoietin-related protein 2	ANGPTL2	3.30	5.97E-05
Nidogen-1	NID1	3.29	7.45E-04
Tetranectin	CLEC3B	3.28	1.72E-05
Mannan-binding lectin serine protease 2	MASP2	3.27	1.17E-04
Phosphoinositide-3-kinase-interacting protein 1	PIK3IP1	3.22	7.65E-04
Cystatin-M	CST6	3.16	5.76E-03
Proteoglycan 4	PRG4	3.13	4.43E-03
Plasma serine protease inhibitor	SERPINA5	3.11	3.47E-04
Hyaluronidase-1	HYAL1	3.11	2.34E-03
Laminin subunit alpha-4	LAMA4	3.08	2.94E-04
Procollagen C-endopeptidase enhancer 1	PCOLCE	3.04	1.09E-05
Plexin domain-containing protein 2	PLXDC2	3.02	4.76E-05
Protein AMBP	AMBP	2.98	1.66E-04
Cartilage oligomeric matrix protein	COMP	2.94	2.82E-04
Collectin-12	COLEC12	2.74	6.86E-03
Osteopontin	SPP1	2.73	1.57E-04
Collagen alpha-3(VI) chain	COL6A3	2.62	0.0124
Trypsin-1	PRSS1	2.53	1.38E-03

Metalloproteinase inhibitor 2	TIMP2	2.48	1.47E-03
Cathepsin Z	CTSZ	2.39	5.76E-03
Multimerin-2	MMRN2	2.30	0.0104
EGF-containing fibulin-like extracellular matrix protein 2	EFEMP2	2.24	5.79E-05
Elafin	PI3	2.17	2.02E-03
Plasma protease C1 inhibitor	SERPING1	2.07	0.0126
Insulin-like growth factor-binding protein 2	IGFBP2	2.06	2.57E-04
Glypican-3	GPC3	1.97	2.81E-03
Cathepsin D	CTSD	1.95	2.13E-03
Cystatin-C	CST3	1.94	0.0201
WNT1-inducible-signaling pathway protein 2	WISP2	1.82	0.0279
Cathepsin C	CTSC	1.77	0.0258
Latent-transforming growth factor beta-binding protein 2	LTBP2	1.74	0.0311
Mucin-20	MUC20	1.73	0.0126
Tenascin-X	TNXB	1.59	2.59E-03
Cystatin-A	CSTA	1.47	0.0771
Carboxypeptidase N subunit 2	CPN2	1.32	0.0465
Insulin-like growth factor-binding protein 6	IGFBP6	1.28	8.21E-03
Fibrinogen alpha chain	FGA	1.21	0.3079
Insulin-like growth factor II	IGF2	1.20	0.0468
SPARC-like protein 1	SPARCL1	1.07	0.0315
Vitronectin	VTN	0.99	0.1494
Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	0.75	0.3079
Hepatocyte growth factor activator	HGFAC	0.64	0.2689
Protein S100-A9	S100A9	0.50	0.6984
Prothrombin	F2	0.36	0.5848
Lysosomal protective protein	CTSA	0.27	0.7104
Protein S100-A8	S100A8	0.09	0.9480
ECM Proteins More Abundant in FSGS-NOS Urine			
Coagulation factor XII	F12	-0.04	0.9480
Leucine-rich alpha-2-glycoprotein	LRG1	-0.09	0.9353
Cornulin	CRNN	-0.14	0.9350
Lumican	LUM	-0.43	0.5753
Serpin B4	SERPINB4	-1.10	0.3059
Extracellular matrix protein 1	ECM1	-1.41	0.0157
Hemopexin	HPX	-1.56	0.0774
Kallistatin	SERPINA4	-1.92	0.0888
Plasminogen	PLG	-1.96	3.76E-03
Hyaluronan-binding protein 2	HABP2	-2.24	8.14E-03

Insulin-like growth factor-binding protein complex acid labile subunit	IGFALS	-2.41	1.15E-03
Thyroxine-binding globulin	SERPINA7	-2.43	2.98E-03
Histidine-rich glycoprotein	HRG	-2.57	0.0435
Inter-alpha-trypsin inhibitor heavy chain H1	ITIH1	-2.61	0.0157
Fibrinogen beta chain	FGB	-2.65	0.0223
Alpha-2-antiplasmin	SERPINF2	-2.72	3.73E-04
Corticosteroid-binding globulin	SERPINA6	-2.77	1.38E-03
Alpha-1-antichymotrypsin	SERPINA3	-2.77	6.04E-05
Coagulation factor IX	F9	-2.87	5.35E-03
Alpha-2-macroglobulin	A2M	-2.91	7.12E-03
Angiotensinogen	AGT	-3.05	3.61E-03
Pigment epithelium-derived factor	SERPINF1	-3.13	0.0129
Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	-3.31	3.47E-04
Fibrinogen gamma chain	FGG	-3.42	3.84E-03
Heparin cofactor 2	SERPIND1	-3.97	8.69E-03
Antithrombin-III	SERPINC1	-4.03	1.09E-05
Alpha-1-antitrypsin	SERPINA1	-4.51	1.65E-06
Complement C3	C3	-4.88	5.47E-04

Supplemental Table 6. Peptides derived from ECM Proteins Showing Increased Urine Excretion		
Gene	Number of peptides (FSGS vs MCD)	Number of peptides (cFSGS vs FSGS-NOS)
ANXA1	1	0
COL18A1	2	0
COL1A1	2	2
COL1A2	3	2
COL4A1	1	0
COL5A2	2	1
F2	1	1
FGA	6	2
HPX	4	2
IGF2	2	2
INS	0	2
KNG1	1	0
LRG1	0	1
LTBP4	1	1
MASP2	6	1
MEP1A	1	1
MFAP5	0	1
NID1	2	1
PIK3IP1	1	1
PLG	5	1
S100A9	2	0
SERPINA1	11	10
SERPINA3	1	0
SERPINC1	1	0
SPP1	6	3

Patients with FSGS-NOS were 3 white females with mean \pm SEM serum creatinine of 0.96 ± 0.27 mg/dl and mean \pm SEM urine protein/creatinine of 7463 ± 1205 mg/gm. Patients with cFSGS were 2 males and 1 female, 2 of which were black with mean \pm SEM serum creatinine of 1.59 ± 0.67 mg/dl and mean \pm SEM urine protein/creatinine of 7558 ± 532 mg/gm.

Supplemental Table 7. Proteases Associated with Urine ECM Peptides		
Protease Group	Number of peptides with increased urine excretion in FSGS or cFSGS (percent of total)	Peptides with similar urine excretion between groups (percent of total)
FSGS vs MCD		
	Total = 66	Total = 299
matrix metalloproteinases (MMP)	13 (19.7)	105 (35.1)
cathepsins (CTS)	7 (10.1)	29 (9.7)
MMP + CTS	1 (1.5)	17 (5.7)
MMP + misc	3 (4.5)	10 (3.3)
Plasminogen (PLG)	0 (0)	18 (6.0)
proprotein convertase subtilisin/kexin (PCSK) + misc	6 (9.1)	2 (0.7)
misc	2 (3)	10 (3.3)
All Proteases	32 (48.5)	191 (63.9)
cFSGS vs FSGS-NOS		
	Total = 35	Total = 330
MMP	9 (25.7)	109 (33)
CTS	4 (11.4)	32 (9.7)
MMP + CTS	1 (2.8)	17 (5.2)
MMP + misc	0 (0)	13 (3.9)
PLG	0 (0)	18 (5.4)
PCSK + misc	6 (17.1)	2 (0.6)
misc	1 (2.8)	11 (3.3)
All Proteases	21 (60)	202 (61.2)