

**Table S6. Differential expression of genes of the chaperones family.** Genes in italics are known to interact with CFTR; ns: non significant.

hgnc_symbol	Synonym	Log <sub>2</sub> FC	p-adj	Description	Result	
HSPA1A	HSP70 member 1A	-0.618	3.27×10 <sup>-03</sup>	heat shock protein family A (Hsp70) member 1A [Source:HGNC Symbol;Acc:HGNC:5232]	less than 2 fold change	
HSPA1B	HSP70 member 1B	-0.287	1.75×10 <sup>-01</sup>	heat shock protein family A (Hsp70) member 1B [Source:HGNC Symbol;Acc:HGNC:5233]	ns	
HSPA2	HSP70 member 2	-1.182	4.06×10 <sup>-04</sup>	heat shock protein family A (Hsp70) member 2 [Source:HGNC Symbol;Acc:HGNC:5235]	significant	increased in SC
HSPA4	HSP70 member 4	0.202	7.67×10 <sup>-02</sup>	heat shock protein family A (Hsp70) member 4 [Source:HGNC Symbol;Acc:HGNC:5237]	ns	
HSPA5	HSP70 member 5	0.845	1.97×10 <sup>-20</sup>	heat shock protein family A (Hsp70) member 5 [Source:HGNC Symbol;Acc:HGNC:5238]	less than 2 fold change	
HSPA6	HSP70-B'	1.668	6.58×10 <sup>-02</sup>	heat shock protein family A (Hsp70) member 6 [Source:HGNC Symbol;Acc:HGNC:5239]	ns	
HSPA8	HSC70	-0.137	3.63×10 <sup>-01</sup>	heat shock protein family A (Hsp70) member 8 [Source:HGNC Symbol;Acc:HGNC:5241]	ns	
HSPA9	HSP70 member 9	0.058	7.53×10 <sup>-01</sup>	heat shock protein family A (Hsp70) member 9 [Source:HGNC Symbol;Acc:HGNC:5244]	ns	
HSPA12A	HSP70 member 12A	-0.726	1.38×10 <sup>-02</sup>	heat shock protein family A (Hsp70) member 12A [Source:HGNC Symbol;Acc:HGNC:19022]	less than 2 fold change	
HSPA13	HSP70 member 13	0.680	1.68×10 <sup>-04</sup>	heat shock protein family A (Hsp70) member 13 [Source:HGNC Symbol;Acc:HGNC:11375]	less than 2 fold change	
HSPA14	HSP70 member 14	0.345	6.18×10 <sup>-02</sup>	heat shock protein family A (Hsp70) member 14 [Source:HGNC Symbol;Acc:HGNC:29526]	ns	
HSPB1	small HSP member 1	-0.084	7.21×10 <sup>-01</sup>	heat shock protein family B (small) member 1 [Source:HGNC Symbol;Acc:HGNC:5246]	ns	
HSPB8	small HSP member 8	0.473	2.50×10 <sup>-01</sup>	heat shock protein family B (small) member 8 [Source:HGNC Symbol;Acc:HGNC:30171]	ns	
HSPB11	small HSP member 11	-0.382	5.64×10 <sup>-03</sup>	heat shock protein family B (small) member 11 [Source:HGNC Symbol;Acc:HGNC:25019]	less than 2 fold change	
HSPD1	HSP60 member 1	-0.330	1.69×10 <sup>-02</sup>	heat shock protein family D (Hsp60) member 1 [Source:HGNC Symbol;Acc:HGNC:5261]	less than 2 fold change	
HSPE1	HSP10 member 1	-0.327	1.14×10 <sup>-02</sup>	heat shock protein family E (Hsp10) member 1 [Source:HGNC Symbol;Acc:HGNC:5269]	less than 2 fold change	
HSP90AA1	HSP90AA1	-0.699	6.14×10 <sup>-06</sup>	heat shock protein 90 alpha family class A member 1 [Source:HGNC Symbol;Acc:HGNC:5253]	less than 2 fold change	
HSP90AB1	HSP90AB1	-0.396	1.19×10 <sup>-04</sup>	heat shock protein 90 alpha family class B member 1 [Source:HGNC Symbol;Acc:HGNC:5258]	less than 2 fold change	

HSP90B1	HSP90B1	0.383	2.65×10 <sup>-03</sup>	heat shock protein 90 beta family member 1 [Source:HGNC Symbol;Acc:HGNC:12028]	less than 2 fold change	
<b>Co-chaperones</b>						
HSPH1	HSP110 member 1	-0.915	1.69×10 <sup>-11</sup>	heat shock protein family H (Hsp110) member 1 [Source:HGNC Symbol;Acc:HGNC:16969]	less than 2 fold change	
DNAJ co-chaperones						
DNAJA1		-0.192	9.06×10 <sup>-02</sup>	DnaJ heat shock protein family (Hsp40) member A1 [Source:HGNC Symbol;Acc:HGNC:5229]	ns	
DNAJA2		0.311	3.45×10 <sup>-03</sup>	DnaJ heat shock protein family (Hsp40) member A2 [Source:HGNC Symbol;Acc:HGNC:14884]	less than 2 fold change	
DNAJA3		0.137	4.32×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member A3 [Source:HGNC Symbol;Acc:HGNC:11808]	ns	
DNAJA4		-0.817	7.16×10 <sup>-04</sup>	DnaJ heat shock protein family (Hsp40) member A4 [Source:HGNC Symbol;Acc:HGNC:14885]	less than 2 fold change	
DNAJB1		0.032	8.85×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member B1 [Source:HGNC Symbol;Acc:HGNC:5270]	ns	
DNAJB2		-0.238	1.65×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member B2 [Source:HGNC Symbol;Acc:HGNC:5228]	ns	
DNAJB4		-0.053	8.30×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member B4 [Source:HGNC Symbol;Acc:HGNC:14886]	ns	
DNAJB5		1.543	1.21×10 <sup>-08</sup>	DnaJ heat shock protein family (Hsp40) member B5 [Source:HGNC Symbol;Acc:HGNC:14887]	significant	increased in UNC
DNAJB6		-0.204	2.29×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member B6 [Source:HGNC Symbol;Acc:HGNC:14888]	ns	
DNAJB9		0.745	1.28×10 <sup>-03</sup>	DnaJ heat shock protein family (Hsp40) member B9 [Source:HGNC Symbol;Acc:HGNC:6968]	less than 2 fold change	
DNAJB11		0.403	4.09×10 <sup>-03</sup>	DnaJ heat shock protein family (Hsp40) member B11 [Source:HGNC Symbol;Acc:HGNC:14889]	less than 2 fold change	
DNAJB12		0.177	3.31×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member B12 [Source:HGNC Symbol;Acc:HGNC:14891]	ns	
DNAJB13		-0.984	1.23×10 <sup>-08</sup>	DnaJ heat shock protein family (Hsp40) member B13 [Source:HGNC Symbol;Acc:HGNC:30718]	less than 2 fold change	
DNAJB14		0.197	3.76×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member B14 [Source:HGNC Symbol;Acc:HGNC:25881]	ns	
DNAJC1		0.955	1.64×10 <sup>-07</sup>	DnaJ heat shock protein family (Hsp40) member C1 [Source:HGNC Symbol;Acc:HGNC:20090]	less than 2 fold change	
DNAJC2		-0.091	6.44×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C2 [Source:HGNC Symbol;Acc:HGNC:13192]	ns	
DNAJC3		0.356	4.27×10 <sup>-03</sup>	DnaJ heat shock protein family (Hsp40) member C3 [Source:HGNC Symbol;Acc:HGNC:9439]	less than 2 fold change	

DNAJC4	0.067	8.33×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C4 [Source:HGNC Symbol;Acc:HGNC:5271]	ns	
DNAJC5	0.298	5.12×10 <sup>-03</sup>	<i>DnaJ heat shock protein family (Hsp40) member C5 [Source:HGNC Symbol;Acc:HGNC:16235]</i>	less than 2 fold change	
DNAJC5B	-2.420	4.39×10 <sup>-02</sup>	DnaJ heat shock protein family (Hsp40) member C5 beta [Source:HGNC Symbol;Acc:HGNC:24138]	significant	increased in SC
DNAJC6	-0.766	7.30×10 <sup>-02</sup>	DnaJ heat shock protein family (Hsp40) member C6 [Source:HGNC Symbol;Acc:HGNC:15469]	ns	
DNAJC7	0.171	2.04×10 <sup>-01</sup>	<i>DnaJ heat shock protein family (Hsp40) member C7 [Source:HGNC Symbol;Acc:HGNC:12392]</i>	ns	
DNAJC8	0.163	4.37×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C8 [Source:HGNC Symbol;Acc:HGNC:15470]	ns	
DNAJC9	-0.015	9.69×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C9 [Source:HGNC Symbol;Acc:HGNC:19123]	ns	
DNAJC10	-0.165	3.62×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C10 [Source:HGNC Symbol;Acc:HGNC:24637]	ns	
DNAJC11	0.095	6.81×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C11 [Source:HGNC Symbol;Acc:HGNC:25570]	ns	
DNAJC12	2.043	9.30×10 <sup>-05</sup>	DnaJ heat shock protein family (Hsp40) member C12 [Source:HGNC Symbol;Acc:HGNC:28908]	significant	increased in UNC
DNAJC13	0.399	3.96×10 <sup>-02</sup>	DnaJ heat shock protein family (Hsp40) member C13 [Source:HGNC Symbol;Acc:HGNC:30343]	less than 2 fold change	
DNAJC14	0.017	9.41×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C14 [Source:HGNC Symbol;Acc:HGNC:24581]	ns	
DNAJC15	0.476	1.74×10 <sup>-03</sup>	DnaJ heat shock protein family (Hsp40) member C15 [Source:HGNC Symbol;Acc:HGNC:20325]	less than 2 fold change	
DNAJC16	0.159	5.46×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C16 [Source:HGNC Symbol;Acc:HGNC:29157]	ns	
DNAJC17	0.015	9.68×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C17 [Source:HGNC Symbol;Acc:HGNC:25556]	ns	
DNAJC18	0.022	9.66×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C18 [Source:HGNC Symbol;Acc:HGNC:28429]	ns	
DNAJC19	0.021	9.41×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C19 [Source:HGNC Symbol;Acc:HGNC:30528]	ns	
DNAJC21	0.252	1.65×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C21 [Source:HGNC Symbol;Acc:HGNC:27030]	ns	
DNAJC22	-1.714	4.29×10 <sup>-07</sup>	DnaJ heat shock protein family (Hsp40)	significant	increased

			member C22 [Source:HGNC Symbol;Acc:HGNC:25802]		in SC
DNAJC24	0.254	6.22×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C24 [Source:HGNC Symbol;Acc:HGNC:26979]	ns	
DNAJC25	0.371	1.45×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C25 [Source:HGNC Symbol;Acc:HGNC:34187]	ns	
DNAJC27	-0.632	6.11×10 <sup>-02</sup>	DnaJ heat shock protein family (Hsp40) member C27 [Source:HGNC Symbol;Acc:HGNC:30290]	ns	
DNAJC28	0.248	6.77×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C28 [Source:HGNC Symbol;Acc:HGNC:1297]	ns	
DNAJC30	0.076	8.19×10 <sup>-01</sup>	DnaJ heat shock protein family (Hsp40) member C30 [Source:HGNC Symbol;Acc:HGNC:16410]	ns	
BAG co-chaperones					
BAG1	0.484	9.40×10 <sup>-05</sup>	BCL2 associated athanogene 1 [Source:HGNC Symbol;Acc:HGNC:937]	less than 2 fold change	
BAG2	-1.104	1.82×10 <sup>-06</sup>	BCL2 associated athanogene 2 [Source:HGNC Symbol;Acc:HGNC:938]	significant	increased in SC
BAG3	0.124	3.63×10 <sup>-01</sup>	BCL2 associated athanogene 3 [Source:HGNC Symbol;Acc:HGNC:939]	ns	
BAG4	0.408	8.06×10 <sup>-02</sup>	BCL2 associated athanogene 4 [Source:HGNC Symbol;Acc:HGNC:940]	ns	
BAG5	-0.115	4.70×10 <sup>-01</sup>	BCL2 associated athanogene 5 [Source:HGNC Symbol;Acc:HGNC:941]	ns	
BAG6	0.099	5.46×10 <sup>-01</sup>	BCL2 associated athanogene 6 [Source:HGNC Symbol;Acc:HGNC:13919]	ns	
HSPBP1	-0.810	1.44×10 <sup>-09</sup>	HSPA (Hsp70) binding protein 1 [Source:HGNC Symbol;Acc:HGNC:24989]	less than 2 fold change	
STUB1	-0.212	2.14×10 <sup>-01</sup>	STIP1 homology and U-box containing protein 1 [Source:HGNC Symbol;Acc:HGNC:11427]	ns	
STIP1	-0.117	5.35×10 <sup>-01</sup>	stress induced phosphoprotein 1 [Source:HGNC Symbol;Acc:HGNC:11387]	ns	