

S. No.	Group	Size	p-value	Method	FDR			
1.	D/N 143; D/N 285;	2	0.044*	Charge	yes			
2.	D/N 299; D/N 537;	2	0.044*	Charge	yes			
3.	E/Q 139; H/Q 680;	2	0.024*	Charge	yes			
4.	H/L 59; R/S 219; D/N 116; D/N 142;	4	0.008**	Charge	yes			
5.	S/T 119; S/T 716; F/L 146; F/L 206;	4	0.009**	Grantham	yes			
6.	F/N 169; K/V 422;	2	0.021*	Grantham	yes			
7.	I/L/V 17; F/I 73; N/S 167; N/S 611; A/S 575; A/S 755;	6	0.003**	Grantham	yes			
8.	H/Y 212; I/M 793;	2	0.003**	Grantham	yes			
9.	N/S 226; N/S 708; A/S 580; A/S 880;	4	0.000***	Grantham	yes			
10.	Q/R 244; Q/R 651;	2	0.041*	Grantham	yes			
11.	F/L 3; I/V 176; Q/S 479; Q/S 694; 4	4	0.009**	Grantham	yes			
12.	D/E 314; D/E 844;	2	0.018*	Grantham	yes			
13.	I/L/V 4; H/L 59; N/S 117; N/S 561;	4	0.016*	Grantham	yes			
14.	D/E 411; D/E 941; N/T 475; N/T 663;	4	0.004**	Grantham	yes			
15.	I/V 47; F/V 232; L/V 131; A/V 218; G/S 266; G/S 482;	6	0.007**	Grantham	yes			
16.	F/V 5; H/L/V 75; E/Q 139; E/Q 159;	4	0.013*	Grantham	yes			
17.	D/E 624; D/E 1089;	2	0.018*	Grantham	yes			
18.	F/L 8; F/L 140; S/T 113; S/T 443; 4	4	0.009**	Grantham	yes			
19.	I/M 839; H/Y 1093;	2	0.003**	Grantham	yes			
20.	S/T 113; S/T 443;	2	0.016*	Polarity	yes			
21.	L/M 115; L/M 182;	2	0.035*	Polarity	no			
22.	D/N 116; D/N 142;	2	0.018*	Polarity	yes			
23.	S/T 119; S/T 716;	2	0.016*	Polarity	yes			
24.	D/N 143; D/N 285;	2	0.018*	Polarity	yes			
25.	F/L 146; F/L 206;	2	0.013*	Polarity	yes			
26.	G/S 266; G/S 482;	2	0.038*	Polarity	no			
27.	L/M 281; L/M 1238;	2	0.035*	Polarity	no			
28.	A/S 297; A/S 302;	2	0.024*	Polarity	no			
29.	D/N 299; D/N 537;	2	0.018*	Polarity	yes			
30.	S/T 307; S/T 818;	2	0.016*	Polarity	yes			
31.	D/E 314; D/E 844;	2	0.002**	Polarity	yes			
32.	S/T 398; S/T 945;	2	0.016*	Polarity	yes			
33.	D/E 411; D/E 941;	2	0.002**	Polarity	yes			
34.	A/S 575; A/S 755;	2	0.024*	Polarity	no			
35.	A/S 580; A/S 880;	2	0.024*	Polarity	no			
36.	S/T 593; S/T 948;	2	0.016*	Polarity	yes			
37.	D/E 624; D/E 1089;	2	0.002**	Polarity	yes			
38.	A/S 693; A/S 889;	2	0.024*	Polarity	no			
39.	F/L 8; F/L 140; 2	2	0.013*	Polarity	yes			
40.	A/S 99; A/S 128; 2	2	0.024*	Polarity	no			
41.	I/V 106; I/V 176; 2	2	0.015*	Polarity	yes			
42.	I/V 110; I/V 164; 2	2	0.010**	Polarity	yes			
43.	I/V 1138; I/V 1221;	2	0.010**	Polarity	yes			
44.	I/L 123; I/L 439; 2	2	0.029*	Polarity	no			
45.	I/V 208; I/V 313; 2	2	0.010**	Polarity	yes			
46.	I/L 231; I/L 799; 2	2	0.029*	Polarity	no			
47.	A/T 248; A/T 737;	2	0.014*	Polarity	yes			
48.	A/P 353; A/P 389;	2	0.023*	Polarity	yes			
49.	I/V 407; I/V 640; 2	2	0.010**	Polarity	yes			
50.	I/V 47; I/V 105; 2	2	0.010**	Polarity	yes			
51.	I/V 574; I/V 710; 2	2	0.010**	Polarity	yes			

52.	I/V 698; I/V 727; 2	0.010**	Polarity	yes	
53.	A/T 72; A/T 637; 2	0.014*	Polarity	yes	
54.	I/V 731; I/V 1109; 2	0.010**	Polarity	yes	
55.	I/L 89; I/L 236; 2	0.029*	Polarity	no	
56.	P/T 10; K/R 134; E/K 229; A/S 947; 4	0.010*	Polarity	yes	
57.	E/N 137; E/N 359; I/V 331; I/V 539; 4	0.003**	Polarity	yes	
58.	E/Q 139; Q/S 479; 2	0.036*	Polarity	no	
59.	G/N/W 157; D/P/Q 258; 2	0.010**	Polarity	yes	
60.	E/Q 159; Q/S 694; 2	0.011*	Polarity	yes	
61.	F/Y 165; K/Q 276; 2	0.015*	Polarity	yes	
62.	F/Y 205; K/Q 585; 2	0.015*	Polarity	yes	
63.	Q/T 213; N/S 561; 2	0.015*	Polarity	yes	
64.	F/T 23; A/N 850; A/S 884; A/S 1060; 4	0.003**	Polarity	yes	
65.	D/Q 24; H/Y 212; 2	0.040*	Polarity	no	
66.	F/Y 271; K/Q 695; 2	0.015*	Polarity	yes	
67.	S/T 328; S/T 944; N/T 475; N/T 663; 4	0.000***	Polarity	yes	
68.	N/Q 33; D/N 662; 2	0.041*	Polarity	no	
69.	F/V 5; K/R 200; 2	0.041*	Polarity	no	
70.	I/V 88; A/T 245; A/T 265; 3	0.004**	Polarity	yes	
71.	D/N 116; D/N 142; 2	0.007**	Volume	yes	
72.	E/Q 139; E/Q 159; 2	0.010*	Volume	yes	
73.	D/N 143; D/N 285; 2	0.007**	Volume	yes	
74.	F/L 146; F/L 206; 2	0.004**	Volume	yes	
75.	D/N 299; D/N 537; 2	0.007**	Volume	yes	
76.	D/E 314; D/E 844; 2	0.014*	Volume	yes	
77.	D/E 411; D/E 941; 2	0.014*	Volume	yes	
78.	N/T 475; N/T 663; 2	0.017*	Volume	yes	
79.	D/E 624; D/E 1089; 2	0.014*	Volume	yes	
80.	A/S 693; A/S 889; 2	0.014*	Volume	yes	
81.	F/L 8; F/L 140; 2	0.004**	Volume	yes	
82.	A/S 884; A/S 1060; 2	0.014*	Volume	yes	
83.	A/S 99; A/S 128; 2	0.014*	Volume	yes	
84.	I/V 110; I/V 164; L/Q 565; G/S 937; S/T 307; S/T 818; 6	0.002**	Volume	yes	
85.	S/T 113; S/T 443; I/V 208; I/V 313; Q/T 213; G/S 482; 6	0.001**	Volume	yes	
86.	L/M 115; L/M 1238; 2	0.025*	Volume	yes	
87.	I/L 123; I/L 439; A/S 575; A/S 755; 4	0.006**	Volume	yes	
88.	C/D/T 16; H/K/R 463; A/G 490; 3	0.021*	Volume	yes	
89.	F/N 169; L/S 587; S/T 328; S/T 944; 4	0.009**	Volume	yes	
90.	L/M 182; N/T 744; 2	0.018*	Volume	yes	
91.	N/S 226; N/S 611; A/T 248; A/T 737; 4	0.000***	Volume	yes	
92.	I/L 231; I/L 799; A/S 580; A/S 880; 4	0.006**	Volume	yes	
93.	F/V 232; A/Q 877; I/V 574; I/V 710; S/T 398; S/T 945; 6	0.001**	Volume	yes	
94.	Q/R 244; Q/R 651; I/V 698; I/V 727; 4	0.018*	Volume	yes	
95.	I/L 246; A/S 297; A/S 302; 3	0.004**	Volume	yes	
96.	A/P 353; A/P 389; 2	0.012*	Volume	yes	
97.	K/N 465; Q/S 479; 2	0.033*	Volume	yes	
98.	A/P 480; Q/V 682; 2	0.018*	Volume	yes	
99.	A/I 887; F/S 1102; 2	0.044*	Volume	yes	