

Supplementary Table 5a | B2a Covariation Analysis

B2a-1			B2a-2		
Positions	No.	P	Positions	No.	P
1405-1407	8	0.0238	1407-1408	5	1.0000
1405-1494	5	N/D	1407-1409	5	1.0000
1405-1495	4	1.0000	1407-1491	3	1.0000
1405-1496	5	0.2000	1407-1494	5	1.0000
1407-1494	7	0.7619	1408-1409	12	0.5227
1407-1495	6	1.0000	1408-1491	11	0.2364
1407-1496	8	1.0000	1408-1494	4	0.2500
1494-1495	6	0.8000	1409-1491	17	1.0000
1494-1496	8	0.2143	1409-1494	5	1.0000
1495-1496	6	0.8000	1491-1494	2	1.0000

Supplementary Table 5b | B2b Covariation Analysis

B2b-1			B2b-2		
Positions	No.	P	Positions	No.	P
791-792	2	1.0000	1514-1515	34	0.3295
791-793	1	N/D	1514-1516	21	0.4946
792-793	24	0.0048	1514-1520	47	0.0423
			1514-1521	49	0.4574
			1515-1516	19	0.1281
			1515-1520	47	0.4615
			1515-1521	44	0.2039
			1516-1520	31	0.8521
			1516-1521	28	0.6599
			1520-1521	64	0.0119

B2b-3		
Positions	No.	P
1517-1518	0	N/D

Supplementary Table 5c | B2c Covariation Analysis

B2c-1			B2c-2		
Positions	No.	P	Positions	No.	P
770-771	39	0.0005	772-773	46	1.0000
770-808	36	0.9725	772-806	44	0.7140
770-809	34	0.0007	772-807	48	0.4425
770-899	16	1.0000	773-806	61	0.2550
770-900	15	0.7922	773-807	60	0.2926
771-808	51	0.0013	806-807	59	0.1219
771-809	41	0.0460			
771-899	20	0.1571			
771-900	13	0.1930			
808-809	39	0.2909			
808-899	17	0.0167			
808-900	12	0.3506			
809-899	13	1.0000			
809-900	12	1.0000			
899-900	15	0.5972			

Supplementary Table 5d | B3 Covariation Analysis

B3-1			B3-2		
Positions	No.	P	Positions	No.	P
1415-1416	28	0.3496	1417-1418	3	0.3333
1415-1483	9	0.5556	1417-1482	1	N/D
1415-1484	30	0.0635	1417-1483	2	N/D
1415-1485	41	0.1127	1418-1482	4	N/D
1416-1483	7	1.0000	1418-1483	0	N/D
1416-1484	36	0.0000	1482-1483	0	N/D
1416-1485	38	0.7463			
1483-1484	9	0.1429			
1483-1485	15	0.8202			
1484-1485	41	0.5120			

Supplementary Table 5e | B3/B6 Covariation Analysis

B3-3			B6-3		
Positions	No.	P	Positions	No.	P
1418-1419	21	0.1675	1424-1425	47	0.0006
1418-1420	21	0.2319	1424-1475	40	0.5353
1418-1480	28	0.0567	1424-1476	54	0.0429
1418-1481	26	0.1042	1425-1475	46	0.0139
1419-1420	15	0.9401	1425-1476	54	0.6906
1419-1480	19	0.8762	1475-1476	46	0.0083
1419-1481	15	1.0000			
1420-1480	18	0.6674			
1420-1481	17	0.7882			
1480-1481	22	0.0012			

Supplementary Table 5f | B6 Covariation Analysis

B6-1			B6-2		
Positions	No.	P	Positions	No.	P
1426-1427	105	0.0957	1429-1430	27	1.0000
1426-1428	41	0.1092	1429-1470	22	0.0613
1426-1472	104	0.0589	1429-1471	16	0.3887
1426-1473	93	0.1364	1430-1470	36	0.9710
1426-1474	71	0.0292	1430-1471	29	0.1857
1427-1428	46	0.0206	1470-1471	26	0.7163
1427-1472	118	0.3204			
1427-1473	101	0.0926			
1427-1474	77	0.3283			
1428-1472	44	0.5473			
1428-1473	40	0.5472			
1428-1474	30	0.5488			
1472-1473	101	0.0005			
1472-1474	75	0.4273			
1473-1474	67	0.0620			

Supplementary Table 5g | B7a Covariation Analysis

B7a		
Positions	No.	P
700-701	10	0.7857
700-702	20	0.7446
700-703	23	0.3924
701-702	18	0.5552
701-703	21	0.8142
702-703	27	0.6930