Supplemental Information

Constitutive activation of Lyn kinase enhances BCR-responsiveness but not the development of CLL in *Eμ-TCL1* mice

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Supplemental materials

Table S1: List of fluorochrome labelled antibodies used for flow cytometry experiments.

Antibody	Manufacturer	Clone
BrdU-PE	BioLegend	3D4
CD3e-APC	Miltenyi Biotec	17A2
CD5-PE/Vio770	Miltenyi Biotec	53-7.3
CD11b-PE	BioLegend	M1/70
CD19-VioBlue	Miltenyi Biotec	6D5
CD45-VioGreen	Miltenyi Biotec	30F11
Ki67-APC	Miltenyi Biotec	Catalog no: 130-100-332

Table S2: List of primary and secondary antibodies used in Western Blot analyses.

Antibody	Manufacturer	Clone
GAPDH	Cell Signaling	D16H11
phospho-SHIP1 (Y1020)	Cell Signaling	Catalog no.:3941
phospho-SYK (Y525/526)	Cell Signaling	C87C1
phosphotyrosine	Merck	4G10
IRDye® 680LT anti-mouse	LI-COR	Catalog no. 925-68020
IRDye® 680LT anti-rabbit	LI-COR	Catalog no: 926-68023
anti-rabbit-HRP	Cell Signaling	Catalog no: 7074

Table S3: Antibody used for immunohistochemistry staining.

Antibody	Manufacturer	Clone
Cleaved Caspase 3	Cell Signaling	Catalog no: 9661

Supplemental data

Table S4: Log Fold Changes (LFCs) of phosphorylated peptides upon IgM stimulation in WT and Lyn^{up-B} B cells. Values represent the mean of 3 mice per genotype. Related to Figure 1D and S1B.

Peptide name	WT	Lyn^{up-B}
EGFR_862_874	4.290	4.690
FABPH_13_25	2.344	4.687
VGFR1_1046_1058_Y1048F	1.259	5.377
ERBB4_1277_1289	2.509	3.530
JAK2_1001_1013	0.770	4.823
EGFR_1165_1177	2.682	2.862
CALM_93_105	1.771	2.496
VGFR1_1235_1247	0.833	1.695
EPOR_419_431	-0.454	2.732
VGFR1_1162_1174	1.029	1.111
TNNT1_2_14	1.077	0.919
ERBB4_1181_1193	0.818	1.050
VGFR1_1320_1332_C1320K/C1321K	-0.639	2.498
INSR_992_1004	0.729	1.083
GAB2_638_648	0.605	0.911
ERBB2_870_882	0.711	0.779
C1R_199_211	0.514	0.919
FGFR3_641_653	0.811	0.619
LAT_194_206	0.637	0.707
INSR_1348_1360	-0.124	1.412
PGFRB_1014_1028	0.396	0.825
FYN_525_537	0.091	1.088
CBL_693_705	0.518	0.597
FGFR2_762_774	0.351	0.754
ANXA1_14_26	0.380	0.669
EGFR_1190_1202	0.356	0.669
ERBB3_1283_1295	0.282	0.668
FGFR3_753_765	0.229	0.718
FAK2_572_584	0.191	0.755
MBP_259_271	0.093	0.845
PRGR_545_557	-0.481	1.413
B3AT_39_51	0.481	0.370
LAT_249_261	0.405	0.444
LCK_387_399	0.147	0.691
LYN_391_403	0.116	0.691
ERBB2_1241_1253	0.053	0.752
GAB1_622_632	0.136	0.630
EPHA1_774_786	0.230	0.471
MK14_173_185	0.153	0.530
FGFR1_761_773	0.010	0.627
EPHA2_765_777	0.111	0.470
AKT1_320_332	0.082	0.444
AKT1_309_321_C310S	0.165	0.328
JAK1_ 1027_1039	0.045	0.446
PLCG1_1246_1258	0.243	0.208
LYN_501_512	-0.002	0.448
CD28_185_197	0.058	0.373
YES_420_432	-0.041	0.456
IRS1_890_902	-0.002	0.414
TYK2_1048_1060	-0.042	0.415
CRK_214_226	-0.139	0.501
VGFR1_1049_1061	-0.797	1.115
KSYK_518_530	-0.119	0.427
STAT3_698_710	0.203	0.090
TEC_512_524	-0.034	0.322
CALM_95_107	0.049	0.238
EPHA7_607_619	-0.076	0.312
MK07_ 212_224	-0.288	0.456
MET_1228_1240	-0.234	0.381
JAK3_974_986	-0.204	0.350
P85A_600_612	-0.196	0.335
MET_1227_1239	-0.174	0.282
PP2AB_297_309	-0.274	0.375
MK12_178_190	-0.168	0.267
PGFRB_572_584	-0.128	0.218
PDPK1_369_381	-0.160	0.230

SRC_524_536	-0.025	0.095
EPHA4_589_601	-0.085	0.151
EPHB1_771_783	-0.174	0.214
ZBT16_621_633	-0.235	0.264
VGFR2_1168_1180	-0.155	0.161
VGFR1_1206_1218	-0.253	0.256
TYRO3_679_691	-0.286	0.273
PAXI_24_36	-0.333	0.301
IRS2_626_638	-0.188	0.143
PGFRB_768_780	-0.193	0.142
PTN11_539_551	-0.389	0.271
RBL2_99_111	-0.368	0.237
MK01_180_192	-0.359	0.225
MUSK_548_560	-0.237	0.082
VGFR3_1061_1073	-0.254	0.091
ZAP70_485_497	-0.404	0.218
PTN11_541_551	-0.375	0.147
PAXI_111_123	-0.372	0.139
PTN11_57_67	-0.403	0.165
MK14_177_187	-0.453	0.203
JAK2_563_577	-0.294	0.018
VGFR2_944_956	-0.295	0.008
CD3E_182_194	-0.395	0.084
ZAP70_313_325	-0.302	-0.012
MAPK3_198_210_C203S	-0.352	0.021
PLCG1_764_776	-0.304	-0.030
NCF1_313_325	-0.282	-0.053
PDPK1_2_14	-0.376	0.041
ACHD_383_395	-0.386	0.048
NTRK2_696_708	-0.356	0.005
PGFRB_771_783	-0.317	-0.035
FRK_380_392	-0.428	0.070
RON_1346_1358	-0.347	-0.036
EPHB1_921_933	-0.606	0.221
RET_1022_1034	-0.460	0.072
ART_004_EAIYAAPFAKKKXC	-0.273	-0.125
FAK1_569_581	-0.428	0.025
EPHB4_583_595	-0.526	0.095
PRRX2_202_214	-0.468	0.037
CD70_9_21_C17S	-0.398	-0.042
PGFRB_1002_1014	-0.438	-0.016
VINC_815_827	-0.551	0.081
VGFR2_1046_1058	-0.396	-0.082
PLCG2_1191_1203_C1200S	-0.413	-0.069
VGFR2_989_1001	-0.420	-0.077
CTNB1_79_91	-0.554	0.055
FER_707_719	-0.475	-0.024
GSK3B_210_222_C218S	-0.388	-0.115
MK03_199_208	-0.384	-0.130
ARAF_297_307	-0.377	-0.141
CDK7_157_169	-0.425	-0.104
RB_804_816	-0.600	0.072
EPOR_361_373	-0.486	-0.045
DCX_67_79	-0.526	-0.009
MK12_180_189_M182B	-0.513	-0.041
MBP_198_210	-0.455	-0.107
K2C6B_53_65	-0.445	-0.123
RAF1_332_344	-0.585	0.006
DYR1A_312_324	-0.459	-0.131
PGFRB_709_721	-0.420	-0.172
ODBA_340_352_D340K	-1.700	1.105
VGFR1_1040_1052	-0.668	0.057
MK08_181_191	-0.469	-0.149
41_654_666	-0.554	-0.094
EGFR_1103_1115	-0.470	-0.197
FES_706_718	-0.623	-0.065
MK10_216_228	-0.558	-0.161
CD28_203_215	-0.540	-0.181
PTN6_558_570	-0.538	-0.186
CD3Z_116_128	-0.491	-0.250
EFS_246_258	-0.554	-0.187
PRGR_786_798	-0.620	-0.127
CD3Z_135_147	-0.635	-0.171

BTLA_252_262	-0.487	-0.341
ODPAT_291_303	-1.914	1.072
CD3E_193_205	-0.592	-0.256
PECA1_706_718	-0.693	-0.166
CD3Z_117_129	-0.684	-0.182
TIE2_986_998	-0.684	-0.191
PLCG1_777_789	-0.735	-0.157
ENOG_37_49	-0.662	-0.287
MPZL1_236_246	-0.600	-0.356
CDK2_8_20	-0.728	-0.235
K2C8_425_437	-0.582	-0.382
PTN11_580_590	-0.607	-0.365
CD3Z_146_158	-0.697	-0.283
CD3Z_105_117	-0.822	-0.162
RASA1_453_465	-0.802	-0.188
PECA1_708_718	-0.707	-0.300
HAVR2_257_267	-0.693	-0.336
CD3Z_77_89	-0.698	-0.341
KIT_930_942_C942S	-0.749	-0.298
PTN6_531_541	-0.840	-0.234
CDK1_9_21	-0.841	-0.244
DYR1A_212_224	-2.135	0.985
PDCD1_221_229_FS219_220KK	-0.822	-0.358
STAT4_714_726	-0.819	-0.433
CDK4_11_23	-1.003	-0.468
ANXA2_17_29	-1.023	-0.638
EGFR_1118_1130	-3.444	1.298
EGFR_908_920	-3.810	-0.649

Table S5: LFCs of dephosphorylation of peptide substrates upon IgM stimulation in WT and Lyn$^{up\text{-}B}$ B cells. Values represent the mean of 2 mice per genotype. Related to Figure 1E.

Peptide no	WT	Lyn$^{up\text{-}B}$
1	0.168	0.011
2	0.094	-0.161
3	0.263	-0.093
4	0.323	-0.116
5	0.205	-0.060
6	0.123	-0.359
7	0.519	-0.457
8	0.341	-0.070
9	0.199	-0.107
10	0.060	-0.021
11	0.557	0.095
12	0.087	-0.147
13	0.155	0.047
14	0.363	0.076
15	0.379	0.035
16	0.212	-0.262
17	0.082	-0.041
18	0.134	-0.144
19	0.449	-0.247
20	0.467	-0.113
21	0.091	-0.037
22	0.359	-0.311
23	0.533	-0.294
24	0.349	-0.344
25	-0.563	-0.054
26	0.384	-0.203
27	0.508	-0.154
28	0.114	0.000
29	0.270	-0.101
30	0.343	-0.140
31	0.128	-0.219
32	0.349	0.025
33	-0.037	-0.568
34	0.247	-0.046
35	0.357	-0.511
36	0.186	-0.128
37	0.199	-0.072
38	0.256	-0.025

39	0.345	-0.188
40	0.044	-0.250
41	0.000	-0.186
42	0.495	-0.009
43	0.095	-0.215
44	0.089	-0.183
45	0.244	-0.086
46	0.570	0.120
47	0.189	-0.103
48	0.486	-0.046
49	0.321	-0.050
50	0.264	-0.164
51	0.260	-1.006
52	0.377	-0.143
53	0.417	0.024
54	0.301	-0.013
55	-0.143	-0.217
56	0.041	-0.138
57	0.121	-0.211
58	0.240	-0.467
59	0.161	-0.129
60	-0.069	-0.243
61	0.034	-0.157
62	0.453	-0.285
63	0.114	-0.180
64	0.253	0.029
65	0.434	0.071
66	0.407	-0.112
67	-0.090	-0.181
68	0.079	-0.179
69	0.191	-0.362
70	0.452	0.047
71	0.431	0.037
72	0.275	-0.113
73	0.363	-0.520
74	0.119	-0.603
75	0.040	-0.182
76	0.208	-0.051
77	0.020	-0.238
78	0.115	-0.053
79	0.200	-0.420
80	0.236	-0.151
81	-0.087	-0.252
82	0.353	-0.035
83	0.022	-0.252
84	0.069	-0.086
85	0.191	-0.127
86	0.155	-0.123
87	0.217	-0.086
88	-0.096	-0.289
89	0.064	-0.160
90	0.161	-0.149
91	0.135	-0.038
92	0.297	-0.128
93	0.097	-0.148
94	-0.242	-0.407
95	-0.033	0.044
96	-0.068	-0.206
97	-0.166	-0.167
98	-0.037	-0.165
99	-0.038	-0.064
100	-0.087	-0.127
101	0.147	-0.091
102	0.274	-0.040
103	0.111	-0.114
104	0.237	0.210
105	0.178	-0.373
106	-0.190	-0.192
107	0.308	0.029
108	-0.050	0.001
109	0.215	-0.470
110	0.473	-0.136
111	0.205	-0.012

112	0.134	-0.181
113	0.594	-0.137
114	0.416	0.190
115	0.498	-0.254
116	0.312	0.018
117	0.273	-0.018
118	0.251	0.129
119	0.251	0.041
120	0.071	-0.171
121	0.147	-0.377
122	-0.075	0.149
123	-0.119	-0.160
124	0.046	-0.249
125	0.182	-0.543
126	-0.016	-0.235
127	-0.017	-0.166
128	-0.184	-0.266
129	-0.007	-0.343
130	0.135	-0.066
131	0.139	-0.044
132	0.309	-0.161
133	0.391	-0.240
134	-0.020	-0.295
135	0.098	-0.119
136	0.326	-0.237
137	0.155	-0.712
138	0.089	-0.173
139	0.071	-0.373
140	0.039	-0.052
141	0.376	-0.395
142	0.249	0.029
143	0.000	-0.297
144	-0.198	-0.160
145	0.310	-0.106
146	0.364	-0.376
147	0.091	-0.295
148	-0.168	-0.053
149	0.031	-0.519
150	0.164	-0.497
151	-0.019	-0.231
152	-0.042	-0.271
153	-0.208	-0.091
154	-0.084	0.605
155	0.391	-1.186
156	0.342	-0.206
157	0.134	-0.190
158	0.088	-0.269
159	0.351	-0.045
160	0.207	-0.608
161	0.420	-0.296
162	0.276	-0.160
163	0.223	-0.210
164	0.306	-0.187
165	0.194	0.200
166	0.030	-0.045
167	-0.017	-0.054
168	0.108	-0.315
169	-0.005	-0.092
170	0.424	-0.233
171	0.093	-0.555
172	0.455	-0.199
173	0.460	-0.209

Table S6: LFCs of phosphorylated peptides upon IgM stimulation in WT and Lyn[up-B] B cells. Values represent the mean of 3 mice per genotype. Related to Figure 4F and S1C.

Peptide name	*TCL1[tg/wt]*	*TCL1[tg/wt]* Lyn[up-B]
FGFR3_641_653	2.148	1.132
ODPAT_291_303	1.397	0.886
VGFR1_1046_1058_Y1048F	0.007	1.546
EGFR_862_874	0.338	1.017
CALM_93_105	0.188	1.018

EGFR_1165_1177	-0.015	1.094
INSR_1348_1360	1.504	-0.439
ERBB4_1277_1289	-0.046	0.884
ODBA_340_352_D340K	0.146	0.690
B3AT_39_51	0.178	0.635
FABPH_13_25	-0.335	1.140
INSR_992_1004	0.101	0.689
ERBB4_1181_1193	0.149	0.592
CRK_214_226	0.222	0.465
VGFR1_1235_1247	0.010	0.676
VGFR1_1162_1174	0.058	0.625
EGFR_1190_1202	0.132	0.548
PLCG1_1246_1258	0.349	0.315
MBP_259_271	0.139	0.460
GAB2_638_648	0.055	0.527
ERBB2_870_882	0.115	0.433
LAT_194_206	0.103	0.430
LYN_501_512	0.081	0.425
TNNT1_2_14	0.230	0.268
JAK2_1001_1013	-0.236	0.732
PGFRB_1014_1028	0.070	0.394
MK14_173_185	0.072	0.387
VGFR1_1049_1061	-1.397	1.851
C1R_199_211	-0.169	0.617
PP2AB_297_309	-0.061	0.507
ERBB3_1283_1295	-0.058	0.466
CBL_693_705	0.028	0.352
TYK2_1048_1060	0.056	0.282
FYN_525_537	-0.122	0.447
KSYK_518_530	0.038	0.273
FGFR2_762_774	0.056	0.249
LAT_249_261	0.001	0.283
MK07_212_224	-0.278	0.551
FAK2_572_584	-0.037	0.304
LCK_387_399	0.022	0.243
FGFR1_761_773	0.027	0.230
EPHA2_765_777	-0.004	0.258
PRGR_545_557	0.152	0.100
ANXA1_14_26	-0.028	0.266
PTN11_539_551	-0.153	0.385
VGFR1_1206_1218	-0.226	0.439
MET_1227_1239	-0.066	0.271
JAK1_1027_1039	-0.133	0.330
LYN_391_403	-0.047	0.237
MK01_180_192	-0.276	0.463
ERBB2_1241_1253	-0.066	0.239
EPHA1_774_786	0.001	0.160
CD28_185_197	-0.239	0.392
PLCG1_777_789	0.198	-0.070
AKT1_309_321_C310S	-0.137	0.256
NTRK2_696_708	-0.141	0.259
VGFR2_1046_1058	-0.051	0.164
FAK1_569_581	0.016	0.089
FGFR3_753_765	-0.060	0.163
JAK2_563_577	-0.023	0.122
CALM_95_107	-0.149	0.248
PTN11_541_551	-0.137	0.233
SRC_524_536	-0.094	0.191
RBL2_99_111	-0.184	0.280
NCF1_313_325	-0.142	0.222
AKT1_320_332	-0.061	0.139
CD3Z_116_128	-0.136	0.212
IRS1_890_902	-0.083	0.138
ACHD_383_395	-0.136	0.179
PGFRB_768_780	-0.220	0.257
CTNB1_79_91	-0.109	0.143
MET_1228_1240	-0.105	0.138
JAK3_974_986	-0.107	0.137
PGFRB_572_584	-0.093	0.123
PDPK1_2_14	-0.046	0.066
PAXI_24_36	-0.149	0.161
TEC_512_524	-0.156	0.163
PAXI_111_123	-0.100	0.106

VGFR2_1168_1180	-0.115	0.111
EGFR_1103_1115	-0.133	0.127
PGFRB_771_783	-0.164	0.157
YES_420_432	-0.169	0.142
EPOR_361_373	-0.116	0.083
EPHB1_771_783	-0.184	0.144
TYRO3_679_691	-0.142	0.094
CDK2_8_20	-0.048	-0.017
ART_004_EAIYAAPFAKKKXC	-0.191	0.126
EPHA7_607_619	-0.206	0.138
P85A_600_612	-0.157	0.087
MK12_178_190	-0.224	0.153
MUSK_548_560	-0.198	0.119
PRRX2_202_214	-0.130	0.047
MK12_180_189_M182B	-0.239	0.151
CD3Z_135_147	-0.119	0.028
MK14_177_187	-0.192	0.090
GSK3B_210_222_C218S	-0.257	0.151
PGFRB_709_721	-0.266	0.159
41_654_666	-0.089	-0.020
VGFR3_1061_1073	-0.184	0.075
MAPK3_198_210_C203S	-0.244	0.134
RET_1022_1034	-0.159	0.046
RON_1346_1358	-0.239	0.116
EPOR_419_431	-0.370	0.246
CD3E_182_194	-0.148	0.024
FER_707_719	-0.094	-0.034
IRS2_626_638	-0.121	-0.008
ARAF_297_307	-0.147	0.008
RAF1_332_344	-0.158	0.006
ZBT16_621_633	-0.301	0.142
ZAP70_485_497	-0.220	0.056
ZAP70_313_325	-0.181	0.012
EFS_246_258	-0.115	-0.056
EPHB1_921_933	-0.374	0.201
PECA1_706_718	-0.140	-0.040
FES_706_718	-0.159	-0.028
VGFR2_944_956	-0.275	0.087
PDCD1_221_229_FS219_220KK	-0.259	0.065
PLCG1_764_776	-0.211	-0.005
EPHA4_589_601	-0.160	-0.057
FRK_380_392	-0.221	-0.004
PDPK1_369_381	-0.197	-0.030
PLCG2_1191_1203_C1200S	-0.195	-0.039
CD3Z_146_158	-0.190	-0.046
MBP_198_210	-0.274	0.036
MK10_216_228	-0.285	0.048
PTN11_57_67	-0.203	-0.041
CD3E_193_205	-0.290	0.042
CD3Z_117_129	-0.133	-0.120
DYR1A_312_324	-0.346	0.093
PTN6_558_570	-0.154	-0.107
EPHB4_583_595	-0.511	0.248
CD3Z_77_89	-0.132	-0.132
VGFR1_1040_1052	-0.303	0.034
RASA1_453_465	-0.252	-0.034
PGFRB_1002_1014	-0.239	-0.054
VGFR2_989_1001	-0.332	0.031
DCX_67_79	-0.372	0.050
KIT_930_942_C942S	-0.213	-0.114
VINC_815_827	-0.388	0.059
CD3Z_105_117	-0.213	-0.137
PTN11_580_590	-0.271	-0.086
MK08_181_191	-0.372	-0.002
MK03_199_208	-0.432	0.044
MPZL1_236_246	-0.224	-0.166
TIE2_986_998	-0.283	-0.128
RB_804_816	-0.336	-0.101
PTN6_531_541	-0.294	-0.144
HAVR2_257_267	-0.321	-0.119
ENOG_37_49	-0.299	-0.143
ANXA2_17_29	-0.378	-0.066
K2C8_425_437	-0.415	-0.046

K2C6B_53_65	-0.459	-0.005
PECA1_708_718	-0.236	-0.239
GAB1_622_632	0.089	-0.579
CD28_203_215	-0.354	-0.139
CDK1_9_21	-0.343	-0.153
STAT4_714_726	-0.426	-0.094
PRGR_786_798	-0.477	-0.066
CDK7_157_169	-0.294	-0.251
BTLA_252_262	-0.364	-0.188
CDK4_11_23	-0.403	-0.172
CD70_9_21_C17S	-0.507	-0.097
DYR1A_212_224	-1.254	0.143
EGFR_1118_1130	-1.180	-0.369
VGFR1_1320_1332_C1320K/C1321K	-0.647	-1.302
EGFR_908_920	-2.745	-0.917
STAT3_698_710	-2.987	-0.882

Table S7: LFCs of dephosphorylation of peptide substrates upon IgM stimulation in WT and Lyn[up-B] B cells. Values represent the mean of 2 mice per genotype. Related to Figure 4G.

Peptide no	*TCL1[tg/wt]*	*TCL1[tg/wt]* Lyn[up-B]
1	0.0148	-0.0064
2	-0.0584	0.0111
3	0.0182	-0.0255
4	0.0432	0.0561
5	0.0340	0.0384
6	-0.0767	-0.0480
7	0.0779	0.0363
8	0.0439	0.0353
9	0.0267	0.0204
10	-0.0232	-0.0271
11	0.0902	0.0544
12	0.0265	0.0422
13	0.0429	0.0311
14	0.0720	0.0570
15	0.0412	0.0517
16	-0.1083	-0.0060
17	-0.0797	-0.0208
18	-0.0533	-0.0078
19	-0.0236	0.0231
20	-0.0077	0.0491
21	-0.0043	-0.0260
22	-0.0011	0.0320
23	0.0326	0.0379
24	0.0427	0.0342
25	-0.2573	-0.1315
26	0.0118	-0.0295
27	0.0755	0.0540
28	0.0385	0.0439
29	-0.0544	-0.0473
30	0.0090	0.0606
31	0.0283	0.0492
32	0.0061	0.0458
33	-0.0545	-0.0104
34	0.0338	0.0618
35	-0.0090	0.0328
36	-0.0368	0.0053
37	0.0087	0.0760
38	0.0684	0.0450
39	0.0521	0.0358
40	0.0028	0.0498
41	0.0003	0.0467
42	0.0821	0.0708
43	0.0047	0.0432
44	-0.0063	0.0745
45	0.0229	0.0736
46	0.0765	0.1203
47	0.0340	-0.0108
48	0.0340	0.0880
49	-0.0775	-0.0192
50	-0.0348	-0.0221
51	-0.2498	-0.0039

52	0.0062	0.0165
53	0.0548	0.0514
54	0.0309	0.0530
55	-0.1407	0.0458
56	0.0412	-0.0728
57	-0.1416	-0.0606
58	-0.0939	-0.0286
59	-0.0072	-0.0682
60	-0.0679	-0.1331
61	-0.0564	-0.0031
62	-0.0043	0.0624
63	-0.0167	-0.0969
64	0.0235	-0.0314
65	0.0277	0.1057
66	0.0009	0.0829
67	-0.0562	-0.0979
68	-0.0892	-0.0275
69	-0.0046	0.0500
70	0.0167	0.0630
71	-0.0633	-0.0055
72	-0.0035	0.0399
73	-0.0524	0.0264
74	-0.0181	0.0322
75	-0.0983	0.0463
76	0.0449	0.0158
77	-0.1586	0.0096
78	0.0372	0.0473
79	0.0024	0.0726
80	0.0153	0.0342
81	0.0143	-0.0614
82	-0.0283	0.0330
83	-0.1321	-0.1183
84	-0.0886	0.0184
85	-0.0409	0.0022
86	-0.1216	0.0361
87	-0.0651	-0.0805
88	-0.0994	-0.0700
89	-0.0493	0.0701
90	-0.0416	0.0060
91	0.0536	-0.0358
92	-0.0515	0.0064
93	-0.0296	0.0022
94	-0.1247	-0.0264
95	-0.0193	-0.0055
96	-0.1171	0.0357
97	-0.0787	-0.1556
98	-0.1006	-0.0023
99	-0.0363	-0.1089
100	-0.1674	-0.0072
101	-0.0450	0.0153
102	0.0512	-0.0744
103	-0.0567	0.0133
104	0.0343	0.0495
105	-0.6895	-0.3335
106	-0.1721	-0.0178
107	-0.0602	0.0496
108	-0.1109	-0.0611
109	-0.0287	-0.0004
110	0.0571	0.0353
111	0.0358	0.0154
112	-0.0340	-0.0200
113	-0.0034	0.0555
114	-0.0390	-0.0746
115	-0.0944	0.0409
116	-0.0323	0.0947
117	0.0527	-0.0244
118	0.0487	0.0381
119	0.0636	0.0553
120	-0.0583	-0.0314
121	-0.1779	-0.0434
122	0.0206	-0.0760
123	-0.0841	-0.0896
124	-0.0035	0.0265

125	-0.2301	-0.0062
126	-0.0965	-0.1214
127	-0.0513	0.0204
128	-0.1266	-0.0627
129	-0.0959	-0.1243
130	-0.0029	-0.0637
131	0.0210	0.0184
132	-0.0344	-0.0001
133	-0.0554	0.0205
134	-0.0113	-0.1038
135	-0.0598	0.0337
136	-0.0680	-0.0018
137	-0.0609	0.0076
138	-0.0585	-0.0779
139	0.0399	-0.1024
140	-0.0373	-0.0214
141	-0.0644	0.0262
142	-0.0293	0.0001
143	-0.1168	-0.0663
144	0.0005	-0.0592
145	-0.0650	0.0326
146	-0.0162	0.0321
147	-0.0052	-0.1919
148	-0.0824	-0.0713
149	-0.1450	-0.1347
150	-0.0171	0.0943
151	-0.1932	-0.0608
152	-0.1391	-0.0232
153	-0.1690	-0.0799
154	-0.7127	-0.1771
155	0.0040	-0.4042
156	0.0346	0.0281
157	-0.0900	-0.0152
158	-0.0592	-0.0543
159	0.0185	0.0487
160	-0.0052	0.0322
161	-0.0780	0.0258
162	0.0315	0.0403
163	0.0344	0.0300
164	-0.1049	-0.0588
165	0.0403	0.0088
166	0.0021	0.0169
167	-0.0678	-0.0593
168	0.0017	0.0315
169	-0.0009	-0.0287
170	-0.0362	0.0301
171	0.0066	0.0268
172	-0.0309	0.0342
173	-0.0133	0.0077

Figure S1A
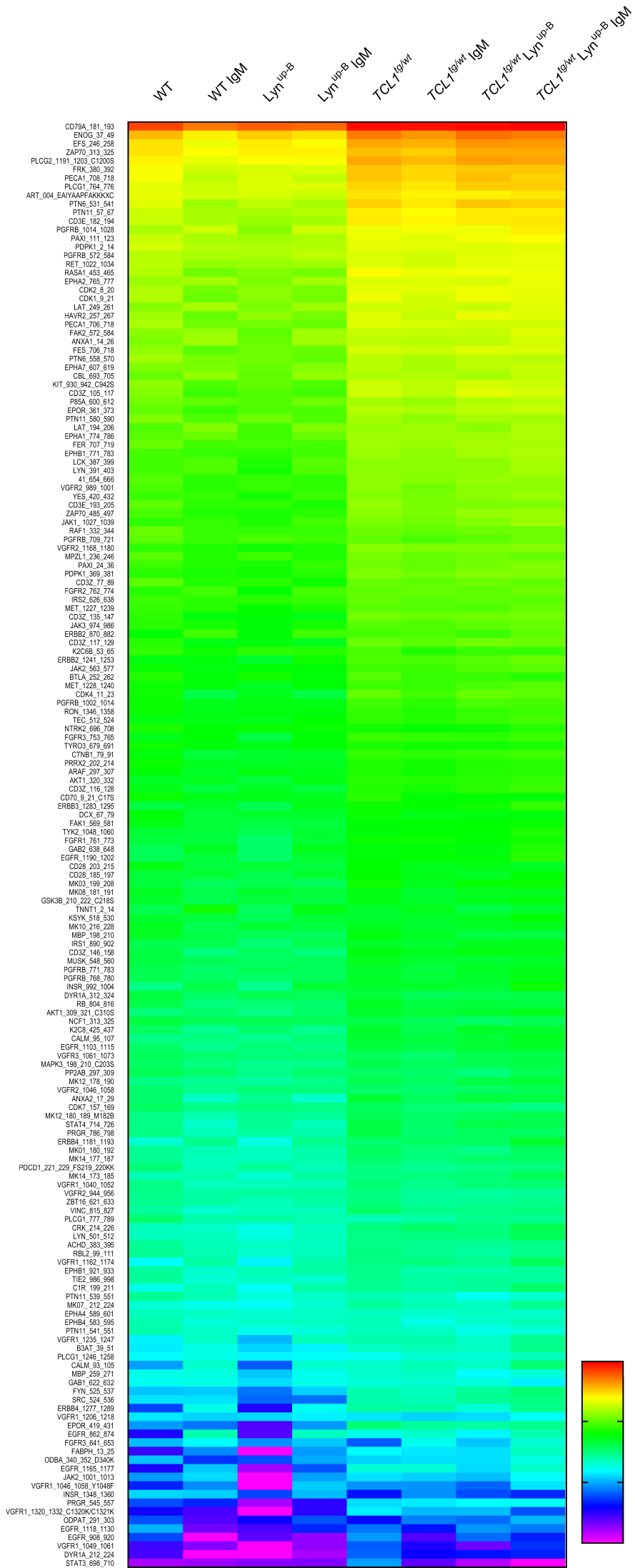
Figure S1B

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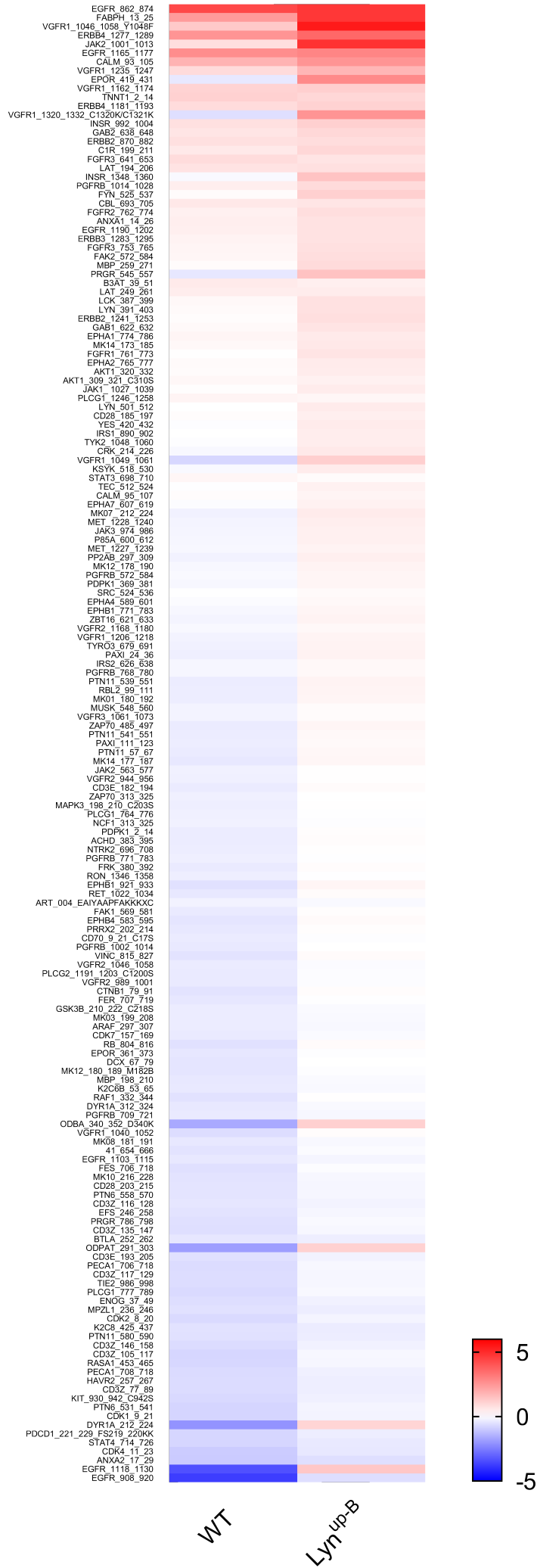
Figure S1C

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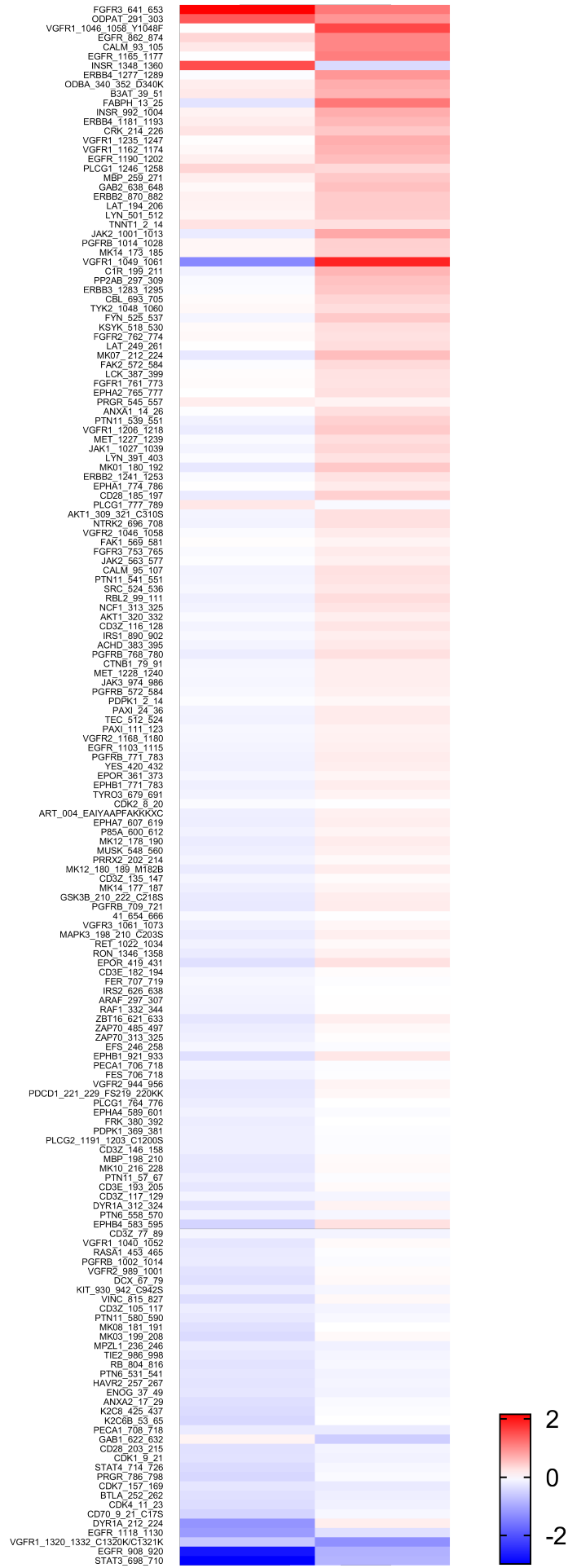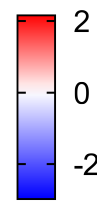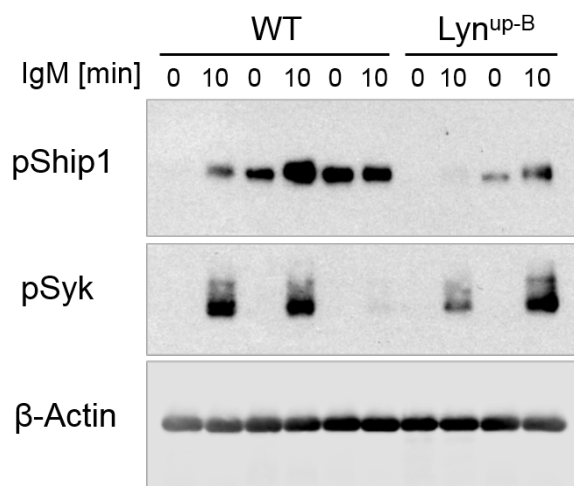
Figure S1D

Figure S2

Figure S3
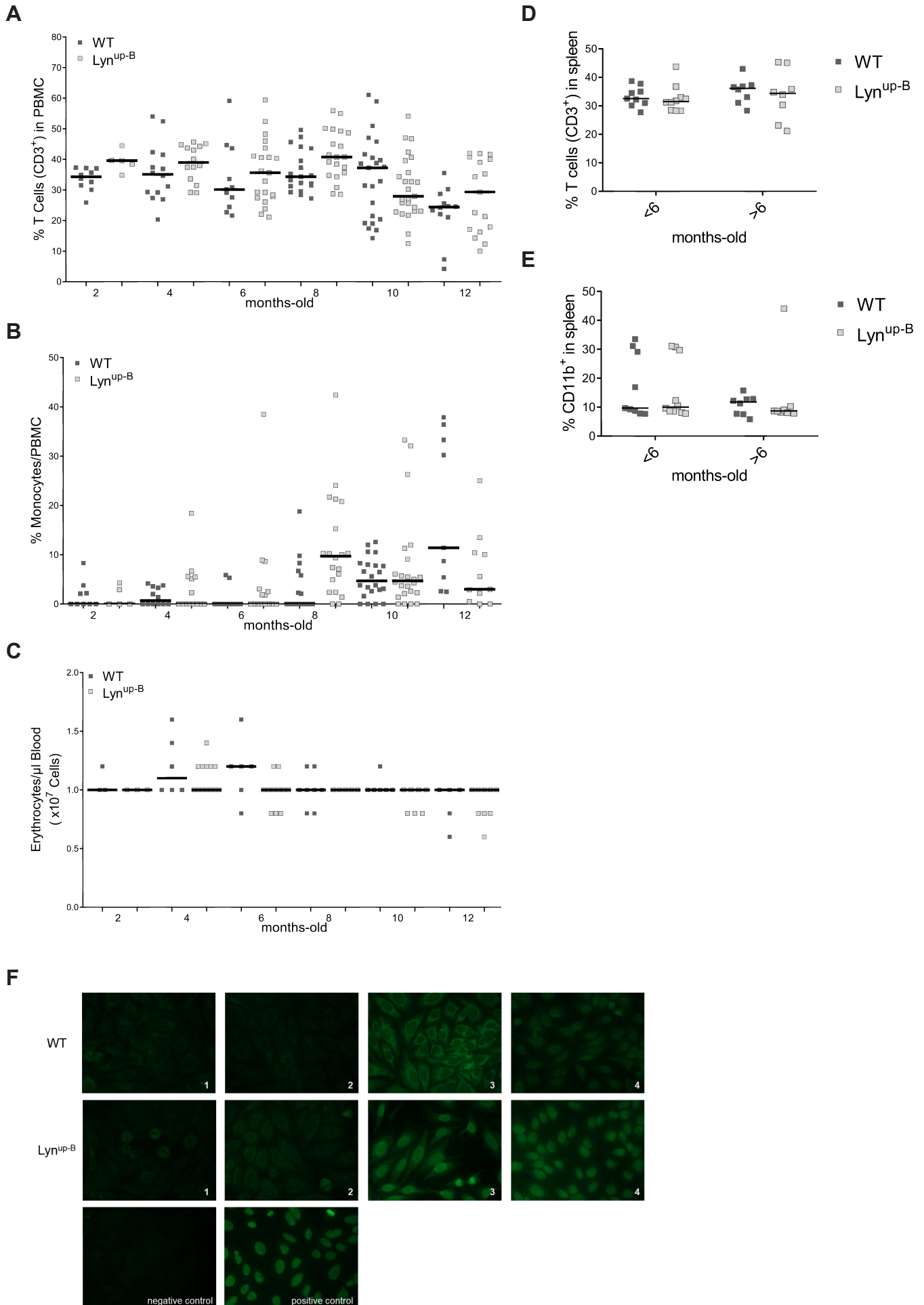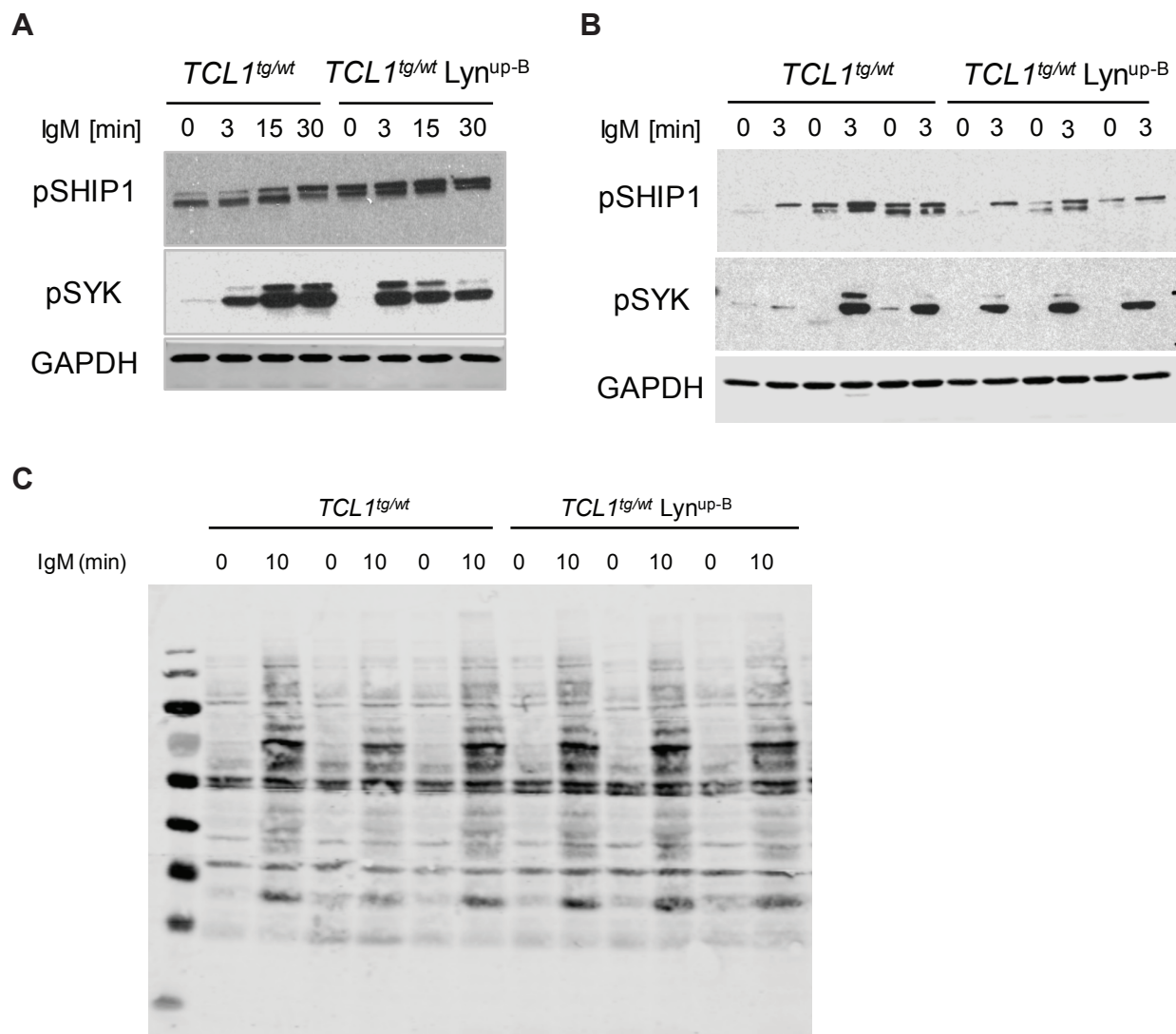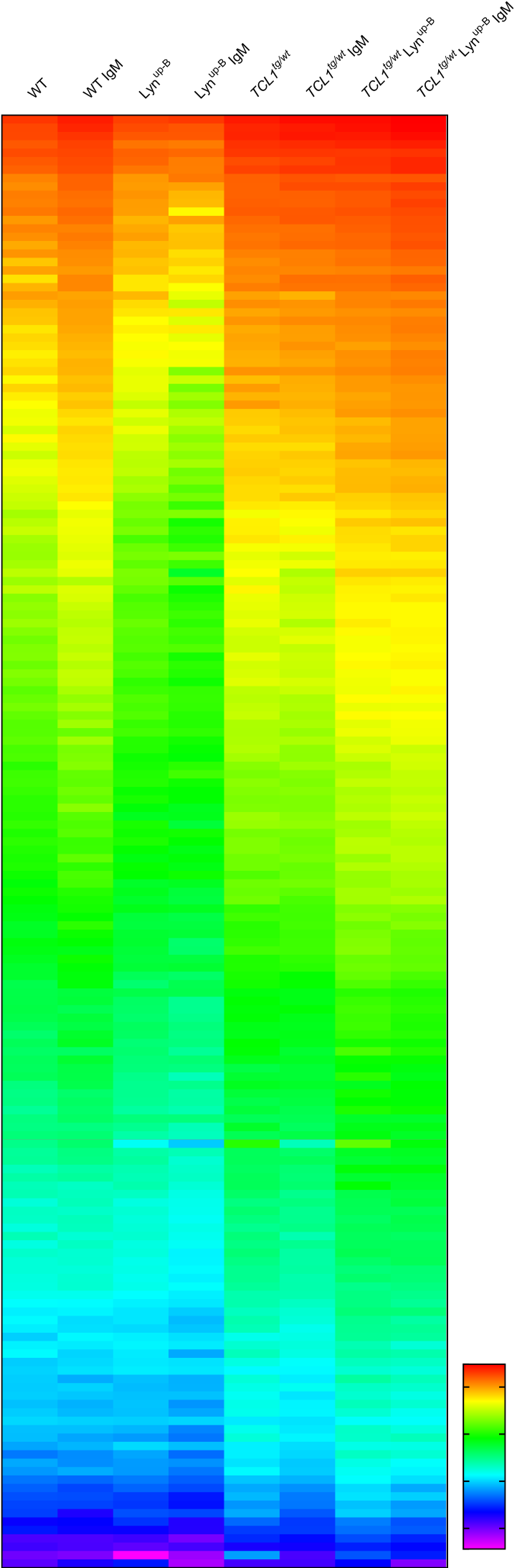
A

B

C

Figure S4

Supplemental Figure Legends

Figure S1
(A) Tyrosine phosphorylation of purified splenic B cells from WT, Lyn^{up-B}, *TCL1$^{tg/wt}$* and *TCL1$^{tg/wt}$* Lyn^{up-B} mice left untreated or stimulated with 20 µg/ml IgM for 10 minutes. Means of 3 animals per genotype are shown. Measured peptides are indicated on the left.
(B) Log Fold Changes (LFCs) of tyrosine phosphorylation upon IgM stimulation of WT and Lyn^{up-B} B cells. Measured peptides are indicated on the left. Related to Figure 1D.
(C) LFCs of tyrosine phosphorylation upon IgM stimulation of *TCL1$^{tg/wt}$* and *TCL1$^{tg/wt}$* Lyn^{up-B} B cells. Measured peptides are indicated on the left. Related to Figure 4F.
(D) Western Blot of splenic B cells from WT and Lyn^{up-B} mice, which were treated with 20 µg/ml IgM for 10 minutes or left untreated. Staining of pShip1, pSyk and β-Actin are shown.

Figure S2
(A) Flow cytometric analysis of CD3$^+$ T cells in the peripheral blood of WT and Lyn^{up-B} mice over 1 year. Lines represent medians.
(B) Percentage of monocytes per PBMC in the peripheral blood of WT and Lyn^{up-B} mice over 1 year time period. Lines represent medians.
(C) Count of erythrocytes per µl blood of WT and Lyn^{up-B} mice over 1 year time period.
(D) Flow cytometric analysis of CD3$^+$ T cells in spleens of young (<6 months) and old (>6 months) WT and Lyn^{up-B} mice. Lines represent medians.
(E) Flow cytometric analysis of CD11b$^+$ cells in spleens of young (<6 months) and old (>6 months) WT and Lyn^{up-B} mice. Lines represent medians.
(F) Autoantibody test from serum of 4 WT and 4 Lyn^{up-B} mice. Mice were 2-4 month old. Serum of the mice was diluted 1:100. In principle, autoantibodies in the serum bind to antigens in human epithelial HEp-2 cells on a slide. A fluorescent secondary antibody served as a marker for an antigen-antibody binding. Tests were counted as positive when a bright fluorescent signal in the nucleus was observed. Accordingly, two Lyn^{up-B} samples were classified as positive and one WT mouse was classified as slight positive.

Figure S3
(A) Western Blot of splenic B cell pools of two animals per genotype of *TCL1$^{tg/wt}$* and *TCL1$^{tg/wt}$* Lyn^{up-B} mice, which were treated with 20 µg/ml IgM initially, after 10 min and after 20 min. IgM incubation was stopped after 3 min, 15 min and 30 min. pShip1, pSyk and Gapdh staining are shown.
(B) Western Blot of isolated splenic B cells from *TCL1$^{tg/wt}$* and *TCL1$^{tg/wt}$* Lyn^{up-B} mice, which were left untreated or stimulated with 20 µg/ml IgM for 3 minutes. Staining of pShip1, pSyk and Gapdh are shown.
(C) Phosphotyrosine staining of a Western Blot of isolated splenic B cells from *TCL1$^{tg/wt}$* and *TCL1$^{tg/wt}$* Lyn^{up-B} mice, untreated or stimulated with 20 µg/ml IgM for 10 minutes.

Figure S4
Dephosphorylated peptides in purified splenic B cells from WT, Lyn^{up-B}, *TCL1$^{tg/wt}$* and *TCL1$^{tg/wt}$* Lyn^{up-B} mice left untreated or stimulated with 20 µg/ml IgM for 10 minutes. Means of 2 animals per genotype are shown. Dephosphorylated peptide names are property of PamGene and have to be kept confidential.