

**Supplementary Table S1. Mutated genes associated with significantly altered JADE2 expression in LUAD as determined using MuTarget.**

Mutation of	Mean expression (mutant)	Mean expression (wild)	Number of mutant	Number of wild	FC (mutant/wild)	Direction	p-value
SLC22A25	853.08	1674.28	12	496	1.96	down	3.60E-05
KCNT1	934.19	1678.32	16	492	1.79	down	4.06E-05
HECW2	1047.79	1678.47	19	489	1.61	down	1.21E-04
KRT34	893.5	1673.31	12	496	1.89	down	2.11E-04
CNTN4	1032.11	1677.76	18	490	1.61	down	2.33E-04
SYCP2	1092.18	1674.37	17	491	1.54	down	5.07E-04
TOX2	1010.87	1674.48	15	493	1.67	down	5.41E-04
ADGRB1	1095.59	1674.25	17	491	1.54	down	7.67E-04
PIK3AP1	1123.22	1674.42	18	490	1.49	down	1.01E-03
CAND1	1004.27	1669.29	11	497	1.67	down	1.37E-03
CADPS	1156.1	1676.39	21	487	1.45	down	1.46E-03
RNF133	979.91	1669.82	11	497	1.69	down	1.56E-03
DSG2	1015.36	1669.04	11	497	1.64	down	1.83E-03
NCAM2	1165.13	1678.11	23	485	1.45	down	1.86E-03
MAST1	995.27	1669.48	11	497	1.67	down	1.95E-03
ATP12A	1107.53	1671.54	15	493	1.52	down	2.22E-03
UBTFL1	1095.83	1668.41	12	496	1.52	down	2.49E-03
EYA4	1158.35	1675.24	20	488	1.45	down	2.56E-03
TCF20	1147.27	1670.33	15	493	1.45	down	3.13E-03
PABPC5	1106.36	1670.43	14	494	1.52	down	3.23E-03
ATOH1	1149.67	1670.26	15	493	1.45	down	3.31E-03
OR4D5	1074	1668.94	12	496	1.56	down	3.43E-03
TCERG1L	1093.46	1669.63	13	495	1.54	down	3.44E-03
PRAMEF11	1078.31	1670.03	13	495	1.54	down	3.54E-03
RREB1	1115.21	1670.18	14	494	1.49	down	3.58E-03

ZNF578	1156.25	1671.1	16	492	1.45	down	3.61E-03
ADCYAP1R1	1078.75	1668.82	12	496	1.54	down	3.65E-03
TMTC2	1070.08	1669.03	12	496	1.56	down	3.83E-03
ATP8B3	1077.75	1668.85	12	496	1.54	down	3.98E-03
REG3G	1130.53	1673.04	17	491	1.47	down	3.99E-03
ZNF267	1149.93	1669.2	14	494	1.45	down	4.06E-03
TCF4	1147.8	1670.31	15	493	1.45	down	4.09E-03
NUTM1	1139.87	1670.56	15	493	1.47	down	4.13E-03
KRT6B	1116.4	1671.27	15	493	1.49	down	4.24E-03
SLC6A18	1137.59	1672.8	17	491	1.47	down	4.29E-03
MAATS1	1161.28	1673.02	18	490	1.45	down	4.31E-03
CACHD1	1049.18	1668.29	11	497	1.59	down	4.54E-03
ATP10A	1132.44	1671.88	16	492	1.47	down	4.74E-03
ITGAV	1109	1669.22	13	495	1.52	down	4.81E-03
ZZEF1	1142.56	1673.71	18	490	1.47	down	5.38E-03
IFI44L	1134.43	1669.64	14	494	1.47	down	5.38E-03
CCDC144A	1036.91	1668.56	11	497	1.61	down	5.46E-03
DCLK1	1136.88	1671.73	16	492	1.47	down	5.46E-03
SLC17A4	1118.67	1671.2	15	493	1.49	down	5.82E-03
MAGEB1	1128.07	1669.82	14	494	1.47	down	6.39E-03
USH1C	1115.23	1669.06	13	495	1.49	down	6.98E-03
KLB	1160.07	1669.94	15	493	1.45	down	7.09E-03
IRX1	1141.87	1670.49	15	493	1.47	down	7.28E-03
MCM10	1067.09	1667.9	11	497	1.56	down	7.46E-03
SCYL2	1115.55	1666.82	11	497	1.49	down	7.74E-03
SFSWAP	1120.33	1667.82	12	496	1.49	down	8.17E-03
PHF20L1	1158.13	1670	15	493	1.45	down	8.36E-03
EIF4G3	1126.77	1668.76	13	495	1.47	down	8.88E-03
REM1	1133.92	1668.57	13	495	1.47	down	8.91E-03

GPC4	1107.85	1669.25	13	495	1.52	down	8.93E-03
HEG1	1068	1667.88	11	497	1.56	down	9.27E-03
PIK3C2G	1154.65	1672.21	17	491	1.45	down	9.77E-03
SPATA31A7	1068.55	1667.86	11	497	1.56	down	9.81E-03
SMC2	1147.23	1668.22	13	495	1.45	down	9.93E-03