

Supplementary Table 2. The results of upstream regulator analysis by IPA.

| Upstream regulator | K19-C2mE/wild-type ^a | | Apo-treated/control ^b | |
|--------------------|---------------------------------|----------|----------------------------------|----------|
| | z-score | p-value | z-score | p-value |
| MYC | 4.89 | 1.53E-19 | 0.941 | 3.78E-06 |
| PDGF BB | 4.485 | 1.36E-09 | 2.658 | 5.01E-10 |
| TNF | 4.462 | 1.41E-39 | 0.628 | 3.17E-05 |
| SOX2 | 3.615 | 2.07E-08 | -0.505 | 2.20E-05 |
| PRKCD | 1.786 | 1.45E-02 | 0.05 | 4.15E-05 |
| TREM1 | 1.688 | 1.24E-10 | 2.714 | 7.70E-05 |
| CCND1 | 1.463 | 1.26E-02 | 1.982 | 2.43E-05 |
| TP63 | 1.313 | 4.99E-22 | 0.714 | 4.49E-10 |
| CREBBP | 1.309 | 7.17E-09 | N.D. | 2.45E-05 |
| MGEA5 | 1.192 | 3.25E-16 | -0.775 | 9.23E-05 |
| TGFB1 | 1.176 | 7.28E-28 | 2.294 | 3.78E-05 |

^a, Upregulated pathways in K19-C2mE mouse gastritis tissues compared with wild-type normal stomach are listed (z-score > 1).

^b, These listed pathways were further examined using differentially expressed genes in apocynin-treated MKN45 cells compared with untreated control cells.