

Supplementary materials

Table S1. siRNA sequences

Target gene	Sense	Antisense
<i>Control</i>	UUCUCCGAACGUGUCACGUTT	ACGUGACACGUUCGGAAATT
<i>NRF3#1</i>	GGAUCAAGUGAUUCUGAUTT	AUCAGAAUCACUUUGAUCCAA
<i>NRF3#2</i>	GCAAAGAAGGAAACUCUUATT	UAAGAGUUUCCUUCUUUGCUU
<i>β-catenin#1</i>	UGGUUGCCUUGCUCACAATT	UUGUUGAGCAAGGCAACCATT
<i>β-catenin#2</i>	AGCUGAUUUGAUGGACAGTT	CUGUCCAUCAUAUCAGCUTT
<i>TCF4#1</i>	GAUGGAAGCUUACUAGAUUTT	AAUCUAGUAAGCUUCCAUCTT
<i>TCF4#2</i>	CAAUGAAUCAGAAACGACGAAUTT	AUUCGUUUCUGAUUCAUUGTT

Table S2. Primer sequences

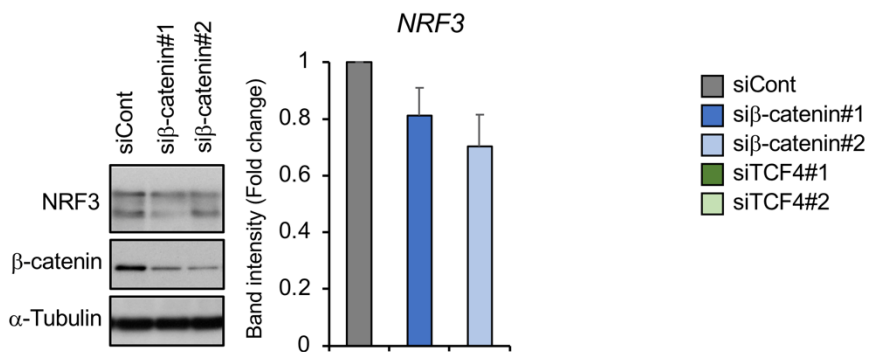
qRT-PCR

Gene	Forward primer	Reverse primer
β-Actin	CCAACCGCGAGAACA	CCAGAGGCGTACAGGG
NRF1	TGGAACAGCAGTGGCAAGATCTCA	GGCACTGTACAGGATTTCACTTGC
NRF2	TACTCCCAGGTTGCCACA	CATCTACAAACGGGAATGTCTGC
NRF3	CTGACTGGGAGGCAGAAAAG	TCAGGCTGTGATGAAAGCAA
β-catenin	TGAGGACAAGCCACAAGATTAC	TCCACCAGAGTGAAAAGAACG
TCF4	CCGACGTAGACCCCAAAACA	ATCCTAGCGGATGGGGGATT
LEF1	ACAGATCACCCACCTCTTG	TGATGGGAAAACCTGGACAT
GLUT1	CTCATCGCTGTGGTGCTG	GGCCGTGTTGACGATACC
Gapdh	CAGAACTACATCCCTGCATCC	CCACCTTCCTGATGTCATCA
Nrf1	AGCCTGCTTTTCCTTGCTAC	CATACAATATGGCACCCAGT
Nrf2	CAAGACTTGGGCCACTTAAAAG	GTAAGGCTTTCCATCCTCATCAC
Nrf3	GCTAAGAGAAAAGACCGAAGCTG	CTGCTCAGAAAAGGAATGTC
Nqo1	AGCTGGAAGCTGCAGACCTG	CCTTTCAHAATGGCTGGCA
Axin2	AAGAGAAGCGACCCAGTCAA	CTGCGATGCATCTCTCTCTG
c-Myc	GCAGGGTCCTGAAGCAGA	GTGTCCGCTCTTGTCGT
Lgr5	GGCACGTAGCTGATGTGGT	TGCAGAAACAACCAGCTGAGA
Cd44	GGACTTTGCCTCTTGCACTT	CTGTAGCGGCCATTTTTCTC
Glut1	CTCATCGCTGTGGTGCTG	GGCCGTGTTGACGATACC
Gclm	TGGAGCAGCTGTATCAGTGG	AAATCTGGTGGCATCACACA
xCt	GGTTGCCCTTGCTTTTT	CAGATTGCAAGGGGGATG

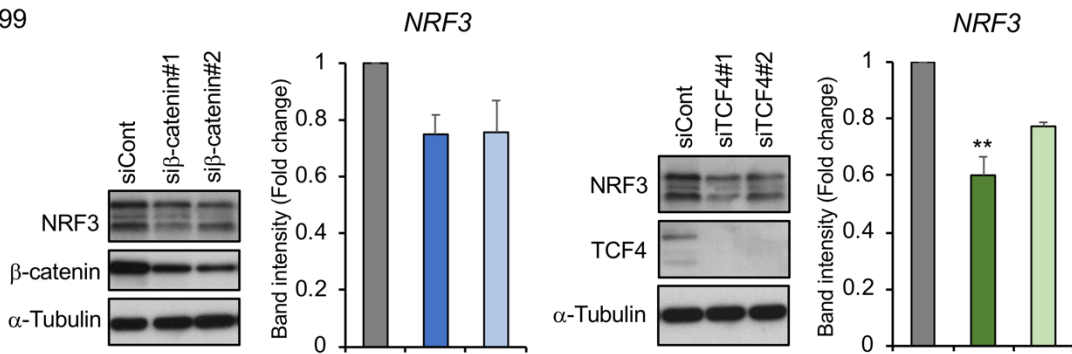
ChIP primer

Target region	Forward primer	Reverse primer
NRF3_WRE	GGATAAGTGTGACCTTAG	GGCTAGTGGGATGCATGG
GLUT1_ARE1	TTCATCACGGAGGAGCTG	GCTCCTGTGGCTCTCAAC
GLUT1_ARE2	CGGGCTGGGAAAAGACTC	CCCTGCTATCCCCTCTTG
GLUT1_ARE3	CATGCCCAGCAAACCTTG	CCGATGCTGAGGAGCAAG

DLD-1



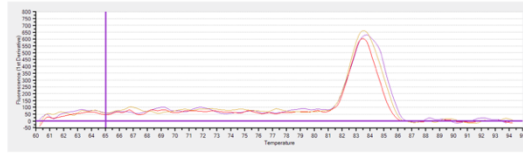
H1299



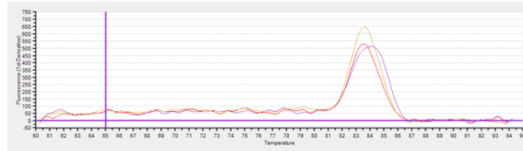
Supplementary Figure S1. Knockdown of either β -catenin or TCF4 exhibits moderately reduction of NRF3 protein levels in DLD-1 and H1299 cells. Western blot analyses using the indicated antibodies were performed. Protein expression were normalized to α -Tubulin protein expression. The data are presented as the mean \pm SD ($n=3$). ** $p<0.01$ (ANOVA-Tukey).

ARE1

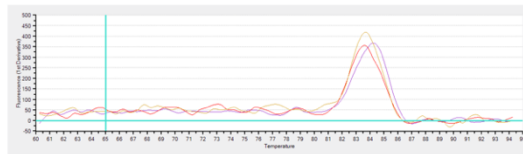
exp1



exp2

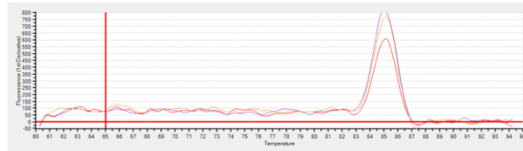


exp3

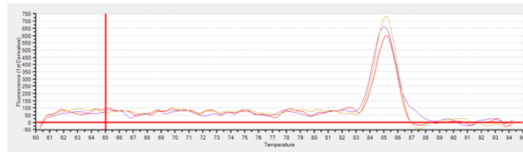


ARE2

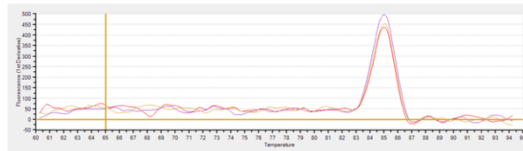
exp1



exp2

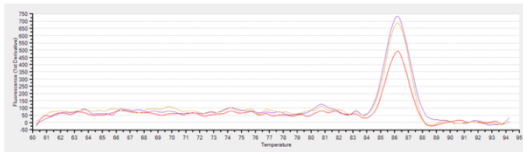


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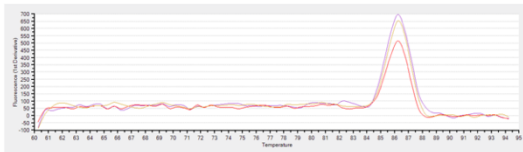


ARE3

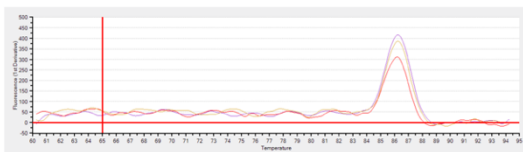
exp1



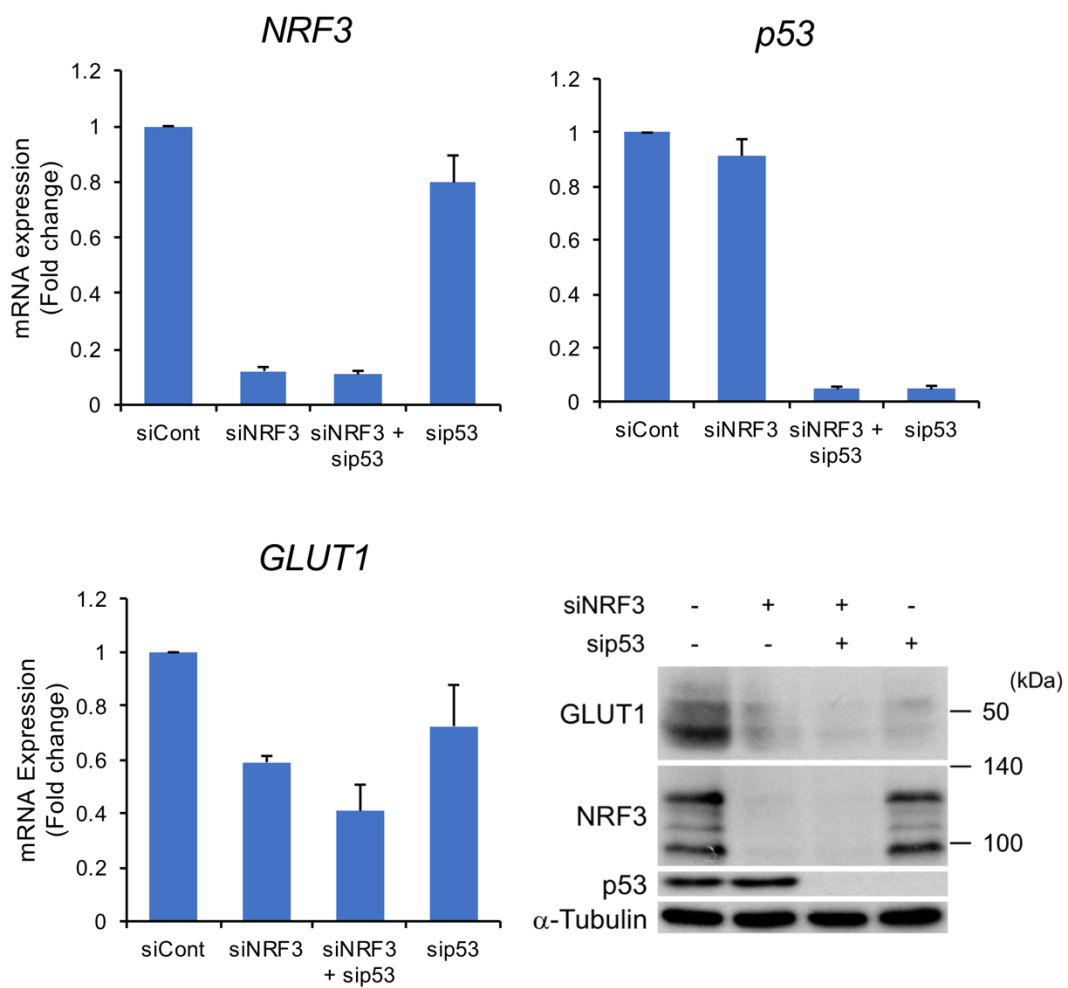
exp2



exp3



Supplementary Figure S2. Melting curves of qRT-PCR in the ChIP analysis of Figure 4C, indicating the specificity of the reaction.



Supplementary Figure S3. The NRF3-mediated *GLUT1* gene expression does not require the p53 reduction. Knockdown of *p53* and/or *NRF3* was performed in HCT116 cells. mRNA expression was normalized to β -actin mRNA. The data are presented as the mean \pm SD (n=3).