

Supplementary table 1. Genes associated with gastrointestinal syndromes

Gene name	Reference sequence
A2ML1	NM_144670.6
ACD	NM_001082486.2
ADM	NM_001124.3
AIP	NM_003977.4
AKT1	NM_001014431.2
ALK	NM_004304.5
ANKRD26	NM_014915.2
APC	NM_001354896.2
ARMC5	NM_001288767.2
ASXL1	NM_015338.6
ATM	NM_000051.3
ATR	NM_001184.4
AXIN1	NM_003502.4
AXIN2	NM_004655.4
BAP1	NM_004656.4
BARD1	NM_000465.4
BLM	NM_000057.4
BMPR1A	NM_004329.2
BRAF	NM_001354609.2
BRCA1	NM_007300.4
BRCA2	NM_000059.3
BRIP1	NM_032043.3
BUB1	NM_004336.5
BUB1B	NM_001211.5
BUB3	NM_004725.4
CBL	NM_005188.4
CDC73	NM_024529.4
CDH1	NM_004360.5
CDK4	NM_000075.4
CDKN1A	NM_001291549.2
CDKN1B	NM_004064.4
CDKN1C	NM_000076.2
CDKN2A	NM_001195132.1
CDKN2B	NM_004936.4
CDKN2C	NM_001262.2
CEBPA	NM_001287424.2
CHEK1	NM_001330427.1
CHEK2	NM_001005735.2
CREBBP	NM_004380.3
CTC1	NM_025099.6
CTNNA1	NM_001323982.2
CTR9	NM_014633.5
CYLD	NM_015247.2
DDB2	NM_000107.2
DDX11	NM_001257144.2

DICER1	NM_001271282.3
DIS3L2	NM_152383.4
DKC1	NM_001363.5
DNAJC21	NM_194283.4
EGFR	NM_005228.5
ELANE	NM_001972.4
ENG	NM_001114753.2
EPCAM	NM_002354.3
ERCC1	NM_001369408.1
ERCC2	NM_000400.3
ERCC3	NM_000122.2
ERCC4	NM_005236.3
ERCC5	NM_000123.3
ERCC6	NM_000124.4
ESR2	NM_001437.2
ETV6	NM_001987.5
EXO1	NM_006027.4
EXT1	NM_000127.2
EXT2	NM_000401.3
EZH2	NM_004456.5
FAN1	NM_014967.5
FANCA	NM_000135.4
FANCB	NM_001018113.3
FANCC	NM_000136.3
FANCD2	NM_033084.5
FANCE	NM_021922.3
FANCF	NM_022725.4
FANCG	NM_004629.1
FANCI	NM_001113378.1
FANCL	NM_001114636.1
FANCM	NM_020937.4
FAS	NM_000043.6
FBXW7	NM_001349798.2
FH	NM_000143.3
FLCN	NM_001353229.2
FOXO3	NM_001455.4
G6PC3	NM_138387.3
GALNT12	NM_024642.5
GATA2	NM_001145661.2
GDNF	NM_001190468.1
GFI1	NM_001127215.2
GPC3	NM_001164617.2
GREM1	NM_001368719.1
GRHL2	NM_024915.4
HABP2	NM_004132.5
HAX1	NM_006118.4
HNF1A	NM_001306179.2
HOXB13	NM_006361.5

IPMK	NM 152230.5
KIF1B	NM 001365951.2
KIT	NM 000222.2
KLLN	NM 001126049.1
KRAS	NM 001369786.1
LIG4	NM 001352604.1
LZTR1	NM 006767.4
MAP2K1	NM 002755.3
MAP2K2	NM 030662.3
MAX	NM 002382.5
MDH2	NM 005918.4
MEN1	NM 001370251.1
MET	NM 001127500.3
MITF	NM 001354604.2
MLH1	NM 000249.3
MLH3	NM 001040108.1
MPL	NM 005373.3
MRE11A	NM 005591.3
Gene name	Reference sequence
MSH2	NM 000251.3
MSH3	NM 002439.5
MSH6	NM 000179.2
MUC5B	NM 002458.3
MUTYH	NM 001128425.1
NBN	NM 002485.4
NF1	NM 001042492.3
NF2	NM 000268.3
NHP2	NM 017838.3
NOP10	NM 018648.3
NPM1	NM 001355006.1
NRAS	NM 002524.5
NSD1	NM 022455.4
NTHL1	NM 002528.7
OGG1	NM 016821.2
PALB2	NM 024675.4
PARK2	NM 004562.3
PARN	NM 002582.4
PAX5	NM 016734.3
PDGFB	NM 002608.4
PDGFRA	NM 001347828.2
PHOX2B	NM 003924.4
PIK3CA	NM 006218.4
PMS1	NM 000534.4
PMS2	NM 001322014.2
PMS2CL	NR 002217.1
POLD1	NM 001308632.1
POLD2	NM 006230.3
POLD3	NM 006591.3

POLD4	NM 021173.5
POLE	NM 006231.4
POLE2	NM 002692.4
POLE3	NM 001278255.1
POLE4	NM 019896.4
POLH	NM 006502.3
POT1	NM 015450.3
POU6F2	NM 001370959.1
PPM1D	NM 003620.4
PRF1	NM 001083116.3
PRKAR1A	NM 001276289.1
PRSS1	NM 002769.5
PTCH1	NM 000264.5
PTCH2	NM 003738.5
PTEN	NM 001304717.5
PTPN11	NM 001330437.1
PTPN12	NM 002835.4
PTPRJ	NM 002843.4
RAD50	NM 005732.4
RAD51C	NM 058216.3
RAD51D	NM 001142571.2
RAF1	NM 001354689.3
RB1	NM 000321.2
RECQL	NM 002907.4
RECQL4	NM 004260.3
REST	NM 001193508.1
RET	NM 020975.6
RHBDF2	NM 024599.5
RINT1	NM 021930.6
RIT1	NM 001256821.2
RNF43	NM 001305544.2
RPL11	NM 000975.5
RPL35A	NM 000996.4
RPL5	NM 000969.5
RPS10	NM 001014.5
RPS17	NM 001021.6
RPS19	NM 001321485.2.2
RPS20	NM 001146227.2
RPS24	NM 001142285.2
RPS26	NM 001029.5
RPS7	NM 001011.4
RTKL1	NM 001283009.2
RUNX1	NM 001754.4
SAMD9	NM 001193307.1
SAMD9L	NM 001303496.3
SBDS	NM 016038.4
SDHA	NM 004168.4
SDHAF2	NM 017841.2

SDHB	NM 003000.3
SDHC	NM 003001.3
SDHD	NM 003002.4
SEC23B	NM 001172745.3
SEMA4A	NM 001193300.2
SFTPA1	NM 001093770.3
SFTPA2	NM 001320814.1
SH2B3	NM 005475.3
SHOC2	NM 001324336.1
SLC26A3	NM 000111.3
SLX4	NM 032444.4
SMAD4	NM 005359.6
SMAD9	NM 001127217.2
SMARCA4	NM 001128849.2
SMARCB1	NM 001362877.2
SMARCE1	NM 003079.5
SOS1	NM 005633.3
SPINK1	NM 001354966.1
SPRED1	NM 152594.3
SQSTM1	NM 003900.5
SRC	NM 005417.4
STK11	NM 000455.5
SUFU	NM 016169.3
TERC	NR 001566.1
TERF2IP	NM 018975.4
TERT	NM 198253.3
TINF2	NM 001099274.3
TMEM127	NM 001193304.3
TNFRSF11A	NM 003839.4
TP53	NM 000546.5
TRIP13	NM 004237.4
TSC1	NM 000368.5
TSC2	NM 000548.5
USB1	NM 024598.4
VHL	NM 000551.3
WAS	NM 000377.3
WRAP53	NM 001143990.1
WRN	NM 000553.6
WT1	NM 024426.6
XPA	NM 000380.3
XPC	NM 004628.4