Potential panel genes of thyroid cancer are (n=50):

Asia:  
BRAF (98.4263%)  
NRAS (0.5288%)  
TSHR (0.3147%)  
AXIN1 (0.2266%)  
KRAS (0.1259%)  
GNAS (0.1007%)  
EGFR (0.0881%)  
PIK3CA (0.0755%)  
HRAS (0.0755%)  
PTEN (0.0378%)  
APC (0.0378%)  
DICER1 (0.0378%)  
AKT1 (0.0252%)  
ATM (0.0252%)  
CTNNB1 (0.0126%)  
TP53 (0.0126%)  
ALK (0.0126%)  
KMT2A (0.0126%)  
FLT3 (0.0126%)  
  
  
The world:  
BRAF (86.9815%)  
RET (3.8874%)  
NRAS (3.1887%)  
TP53 (1.37%)  
HRAS (1.5584%)  
TSHR (1.1371%)  
KRAS (0.7741%)  
PIK3CA (0.6884%)  
KMT2C (0.3083%)  
HLA-A (0.1165%)  
PTEN (0.3631%)  
NOTCH1 (0.1952%)  
NCOR2 (0.137%)  
ATM (0.2432%)  
LRP1B (0.1507%)  
KMT2D (0.1678%)  
CTNNB1 (0.1644%)  
APC (0.185%)  
GNAS (0.2329%)  
ARID1B (0.1439%)  
NF1 (0.1987%)  
MED12 (0.1473%)  
USP6 (0.1028%)  
ZFHX3 (0.1404%)  
NOTCH2 (0.1336%)  
TSC2 (0.1062%)  
ARID1A (0.161%)  
PDE4DIP (0.1165%)  
POLE (0.1165%)  
TRRAP (0.0925%)  
AXIN1 (0.1165%)  
RBM10 (0.1918%)  
MTOR (0.113%)  
SMARCA4 (0.1199%)  
RB1 (0.161%)  
DICER1 (0.1713%)  
CREBBP (0.137%)  
ATRX (0.0856%)  
DNMT3A (0.1678%)  
BRD4 (0.0891%)  
CDKN2A (0.1644%)  
CBFA2T3 (0.0685%)  
KMT2A (0.1302%)  
NCOR1 (0.1028%)  
BRCA2 (0.1062%)  
BCOR (0.1439%)  
PBRM1 (0.0822%)  
ARID2 (0.1267%)  
KDM5C (0.0754%)  
ALK (0.1028%)  
AR (0.1062%)  
MEN1 (0.1267%)  
TERT (0.0891%)  
MSH2 (0.0822%)  
ATR (0.0856%)  
AKT1 (0.1336%)  
BCL11B (0.0685%)  
PER1 (0.0617%)  
RNF213 (0.0685%)  
POLD1 (0.0685%)  
SPEN (0.0891%)  
ROS1 (0.0754%)  
MYO5A (0.0617%)  
MN1 (0.0685%)  
NF2 (0.1165%)  
EGFR (0.1028%)  
TBX3 (0.0617%)  
BCL9L (0.0548%)  
MYH11 (0.0582%)  
LMNA (0.0617%)  
KEAP1 (0.0993%)  
PCM1 (0.0548%)  
JAK1 (0.0685%)  
ASXL1 (0.0788%)  
FAT1 (0.0925%)  
STAG2 (0.0959%)  
TRIP11 (0.0445%)  
CNTRL (0.0582%)  
JAK3 (0.0754%)  
CARD11 (0.0617%)  
BCORL1 (0.0891%)  
NUP98 (0.0548%)  
CIC (0.0617%)  
CDH1 (0.0617%)  
CLIP1 (0.0514%)  
MET (0.0891%)  
LZTR1 (0.0548%)  
PTPRT (0.0548%)  
JAK2 (0.0719%)  
MAML2 (0.0582%)  
COL2A1 (0.0514%)  
SDHA (0.0582%)  
SMAD4 (0.0856%)  
USP8 (0.0514%)  
TET2 (0.0856%)  
FLT4 (0.0685%)  
DNM2 (0.0582%)  
AFF3 (0.0651%)  
IDH1 (0.0925%)  
MRTFA (0.0411%)  
CLTCL1 (0.0411%)  
SETD2 (0.0788%)  
STK11 (0.0685%)  
FANCD2 (0.0719%)  
SND1 (0.0582%)  
TCF3 (0.0445%)  
NUMA1 (0.0445%)  
DAXX (0.0651%)  
TSC1 (0.0514%)  
KDM6A (0.0651%)  
TRIM24 (0.0411%)  
PRDM16 (0.0548%)  
FGFR3 (0.0548%)  
CREB3L2 (0.0411%)  
GRIN2A (0.0719%)  
PTCH1 (0.0651%)  
NTRK3 (0.0548%)  
TPR (0.0411%)  
WRN (0.0445%)  
NKX2-1 (0.0617%)  
FCGR2B (0.048%)  
AKT2 (0.0651%)  
BRCA1 (0.0719%)  
MAP3K1 (0.0651%)  
GNAQ (0.0343%)  
CUX1 (0.0548%)  
FANCA (0.0651%)  
FGFR4 (0.0514%)  
FBXO11 (0.0411%)  
SFPQ (0.0377%)  
MLLT1 (0.048%)  
PML (0.0514%)  
NSD2 (0.0343%)  
PDGFRB (0.0514%)  
PMS2 (0.048%)  
NSD1 (0.0685%)  
BCL6 (0.0343%)  
UBR5 (0.0308%)  
NUP214 (0.0445%)  
CRTC1 (0.0377%)  
HNF1A (0.0514%)  
SS18L1 (0.0411%)  
POLQ (0.0445%)  
FGFR1 (0.0514%)  
POT1 (0.0411%)  
NTRK1 (0.0514%)  
NUTM2B (0.0377%)  
P2RY8 (0.0274%)  
CHD4 (0.0582%)  
BLM (0.0514%)  
MYH9 (0.0377%)  
BCR (0.048%)  
TET1 (0.048%)  
COL1A1 (0.0411%)  
RECQL4 (0.0548%)  
NAB2 (0.0445%)  
SRC (0.0377%)  
VHL (0.0548%)  
CHEK2 (0.0617%)  
SMO (0.0411%)  
NR4A3 (0.0445%)  
NUTM1 (0.0411%)  
LATS1 (0.0411%)  
PTPN13 (0.0377%)  
EP300 (0.0582%)  
SF3B1 (0.0514%)  
GPC3 (0.0274%)  
ERBB3 (0.0343%)  
ATP2B3 (0.048%)  
MAP2K1 (0.0343%)  
PREX2 (0.0514%)  
WT1 (0.048%)  
KDR (0.0514%)  
ACVR1B (0.0377%)  
DDX10 (0.0308%)  
CDKN2C (0.0685%)  
AXIN2 (0.048%)  
TFEB (0.0343%)  
LATS2 (0.048%)  
STAT5B (0.0308%)  
SMARCB1 (0.0514%)  
BRIP1 (0.0343%)  
TRIM33 (0.0308%)  
POU5F1 (0.0343%)  
NFATC2 (0.0308%)  
LRIG3 (0.0274%)  
FBXW7 (0.048%)  
TCF7L2 (0.0308%)  
KDM5A (0.0343%)  
MUTYH (0.0617%)  
FOXO3 (0.0308%)  
BRD3 (0.0411%)  
MSH6 (0.0445%)  
FES (0.0377%)  
FANCC (0.0308%)  
NFKB2 (0.0308%)  
ASPSCR1 (0.0377%)  
DCTN1 (0.0343%)  
PAX8 (0.0343%)  
ELF4 (0.0308%)  
MAP2K4 (0.0377%)  
PRKAR1A (0.0343%)  
KNL1 (0.0308%)  
EWSR1 (0.0343%)  
FLCN (0.0308%)  
ABL2 (0.0377%)  
SMAD3 (0.0308%)  
CCDC6 (0.0411%)  
ERBB2 (0.0411%)  
PTPRB (0.0308%)  
TFE3 (0.0308%)  
DROSHA (0.0274%)  
MUC1 (0.0377%)  
RABEP1 (0.024%)  
IKBKB (0.0274%)  
ERBB4 (0.0308%)  
STRN (0.0343%)  
HSP90AB1 (0.024%)  
AMER1 (0.024%)  
NBN (0.0343%)  
PHOX2B (0.0274%)  
ZMYM2 (0.024%)  
CALR (0.024%)  
SETBP1 (0.0308%)  
CTCF (0.0308%)  
MLLT3 (0.0343%)  
MPL (0.0274%)  
STAT3 (0.0274%)  
CYLD (0.0343%)  
GATA2 (0.0308%)  
PATZ1 (0.0343%)  
NCOA2 (0.0274%)  
MAP2K2 (0.0308%)  
FAT4 (0.0343%)  
ETV1 (0.0308%)  
SMARCE1 (0.0206%)  
MYOD1 (0.0206%)  
BCL9 (0.0343%)  
PIK3R1 (0.0308%)  
CBFB (0.024%)  
SH2B3 (0.0377%)  
SALL4 (0.0206%)  
ABL1 (0.0377%)  
SH3GL1 (0.024%)  
TMPRSS2 (0.0274%)  
ESR1 (0.0274%)  
HIP1 (0.024%)  
NFKBIE (0.0171%)  
PPP2R1A (0.0377%)  
HOXA11 (0.024%)  
IDH2 (0.024%)  
ARHGEF12 (0.024%)  
ELL (0.0274%)  
RARA (0.0274%)  
SLC34A2 (0.0308%)  
MAFB (0.024%)  
EML4 (0.024%)  
MECOM (0.0308%)  
AFDN (0.0274%)  
AFF1 (0.0308%)  
NSD3 (0.0274%)  
AFF4 (0.024%)  
CCND3 (0.0308%)  
CLTC (0.0206%)  
ERCC4 (0.0377%)  
ERCC2 (0.024%)  
SUFU (0.0274%)  
PTPRC (0.024%)  
CIITA (0.024%)  
EXT1 (0.0308%)  
PRDM1 (0.0411%)  
CACNA1D (0.0377%)  
PTPRK (0.0206%)  
FOXO1 (0.024%)  
RUNX1T1 (0.024%)  
PTK6 (0.024%)  
SS18 (0.0206%)  
DDB2 (0.0171%)  
SFRP4 (0.0274%)  
XPC (0.0206%)  
IRF4 (0.0274%)  
FOXP1 (0.024%)  
FLT3 (0.0308%)  
CBLC (0.0137%)  
RAP1GDS1 (0.0171%)  
FUBP1 (0.0274%)  
PLCG1 (0.0206%)  
ETV5 (0.024%)  
FAS (0.0377%)  
NIN (0.024%)  
KAT6A (0.0308%)  
HSP90AA1 (0.0274%)  
CASP8 (0.0274%)  
SUZ12 (0.0206%)  
WAS (0.0206%)  
EBF1 (0.0171%)  
ATP1A1 (0.024%)  
BARD1 (0.0274%)  
EZH2 (0.024%)  
RAD51B (0.024%)  
EPS15 (0.0206%)  
CDK12 (0.0343%)  
PALB2 (0.0274%)  
KIF5B (0.0171%)  
BAP1 (0.024%)  
CRLF2 (0.0206%)  
EIF3E (0.0206%)  
RAD21 (0.0171%)  
FGFR2 (0.0171%)  
MAF (0.0206%)  
BTK (0.024%)  
PAX5 (0.0206%)  
IKZF1 (0.0308%)  
CAMTA1 (0.024%)  
DDX6 (0.0206%)  
PPM1D (0.0171%)  
ERG (0.024%)  
LCK (0.0171%)  
IL6ST (0.024%)  
CDX2 (0.0137%)  
TP63 (0.0343%)  
MALT1 (0.0206%)  
MSI2 (0.0171%)  
HERPUD1 (0.0171%)  
FANCG (0.024%)  
CDK6 (0.0171%)  
MLLT10 (0.024%)  
TRIM27 (0.0137%)  
BUB1B (0.0206%)  
NFE2L2 (0.0308%)  
KIT (0.0171%)  
DDR2 (0.024%)  
RUNX1 (0.0274%)  
IL7R (0.0308%)  
LASP1 (0.0171%)  
PDGFRA (0.0308%)  
CD79B (0.024%)  
RNF43 (0.024%)  
ETNK1 (0.0171%)  
CARS (0.0274%)  
MAP3K13 (0.0206%)  
KAT6B (0.024%)  
CSF3R (0.0206%)  
CEBPA (0.0206%)  
NUTM2D (0.024%)  
TPM4 (0.0171%)  
FOXL2 (0.0171%)  
FH (0.024%)  
DDX3X (0.0171%)  
SRSF3 (0.0171%)  
LYL1 (0.0171%)  
TNFAIP3 (0.0274%)  
PPFIBP1 (0.0137%)  
STAT6 (0.0171%)  
GNA11 (0.0206%)  
MDM4 (0.0206%)  
PTPN11 (0.0206%)  
HOXC13 (0.0171%)  
WWTR1 (0.0171%)  
HIF1A (0.024%)  
CDKN1B (0.0308%)  
RANBP2 (0.0308%)  
SOX2 (0.0206%)  
CDH11 (0.0206%)  
ETV4 (0.0171%)  
LMO2 (0.0171%)  
STIL (0.0171%)  
CCNE1 (0.0206%)  
FUS (0.0171%)  
FCRL4 (0.0171%)  
SYK (0.0274%)  
SRSF2 (0.0171%)  
PHF6 (0.0171%)  
SOCS1 (0.0206%)  
FIP1L1 (0.0171%)  
EPAS1 (0.0171%)  
PSIP1 (0.0171%)  
MSN (0.0137%)  
KTN1 (0.0137%)  
FOXA1 (0.0137%)  
LEF1 (0.0171%)  
GATA1 (0.0206%)  
FLI1 (0.0206%)  
BMPR1A (0.0171%)  
PRF1 (0.0103%)  
U2AF1 (0.0274%)  
NCOA1 (0.0137%)  
CCNB1IP1 (0.0103%)  
POU2AF1 (0.0206%)  
RAF1 (0.0171%)  
TPM3 (0.0137%)  
CREB3L1 (0.0137%)  
TLX3 (0.0137%)  
XPA (0.0137%)  
ERCC5 (0.0206%)  
ETV6 (0.0206%)  
FGFR1OP (0.0171%)  
ACVR2A (0.0171%)  
LPP (0.0206%)  
CBL (0.0171%)  
GOPC (0.0137%)  
TAL1 (0.0137%)  
HMGA1 (0.0137%)  
MDM2 (0.0171%)  
PAX7 (0.0103%)  
EXT2 (0.0137%)  
SDHC (0.0137%)  
ARNT (0.0137%)  
ARHGAP26 (0.0171%)  
CBLB (0.0171%)  
ERCC3 (0.0171%)  
TGFBR2 (0.0206%)  
SDHD (0.0171%)  
LIFR (0.0171%)  
PPARG (0.0206%)  
XPO1 (0.0206%)  
RPL5 (0.0069%)  
RAC1 (0.024%)  
HOXC11 (0.0137%)  
CNOT3 (0.0137%)  
HOXD13 (0.0171%)  
SDC4 (0.0171%)  
GPHN (0.0137%)  
NT5C2 (0.0103%)  
KDSR (0.0137%)  
YWHAE (0.0137%)  
BCL7A (0.0103%)  
CDC73 (0.0171%)  
CANT1 (0.0137%)  
APOBEC3B (0.0103%)  
MYD88 (0.0137%)  
DNAJB1 (0.0103%)  
RPN1 (0.0103%)  
SBDS (0.0103%)  
PDGFB (0.0103%)  
MLH1 (0.0206%)  
FANCF (0.0171%)  
KLF6 (0.0137%)  
GATA3 (0.0137%)  
MYB (0.0103%)  
KCNJ5 (0.0137%)  
MAPK1 (0.0137%)  
CCND1 (0.0103%)  
BIRC3 (0.0103%)  
ABI1 (0.0103%)  
ZNF521 (0.0137%)  
ATIC (0.0103%)  
EZR (0.0171%)  
MYCL (0.0103%)  
OLIG2 (0.0103%)  
TNFRSF14 (0.0103%)  
MITF (0.0171%)  
PPP6C (0.0137%)  
NPM1 (0.0137%)  
BCL3 (0.0103%)  
SDHB (0.0137%)  
CD79A (0.0103%)  
IL21R (0.0103%)  
BTG1 (0.0103%)  
PBX1 (0.0103%)  
ZRSR2 (0.0137%)  
TRAF7 (0.0103%)  
MYCN (0.0171%)  
PDCD1LG2 (0.0137%)  
PIK3CB (0.0171%)  
NRG1 (0.0137%)  
ACSL3 (0.0103%)  
GOLGA5 (0.0103%)  
EIF4A2 (0.0069%)  
TCF12 (0.0069%)  
HNRNPA2B1 (0.0103%)  
NDRG1 (0.0103%)  
ITK (0.0069%)  
H3F3A (0.0069%)  
IKZF3 (0.0069%)  
FEV (0.0034%)  
TBL1XR1 (0.0069%)  
NFIB (0.0069%)  
KLK2 (0.0069%)  
HOXD11 (0.0069%)  
HOOK3 (0.0103%)  
TOP1 (0.0103%)  
QKI (0.0103%)  
SMAD2 (0.0103%)  
KLF4 (0.0103%)  
CD274 (0.0103%)  
WIF1 (0.0103%)  
SLC45A3 (0.0103%)  
SPOP (0.0137%)  
CCND2 (0.0137%)  
TENT5C (0.0137%)  
BCL11A (0.0137%)  
PLAG1 (0.0103%)  
PRCC (0.0103%)  
GAS7 (0.0069%)  
RBM15 (0.0069%)  
ELK4 (0.0069%)  
MAX (0.0103%)  
REL (0.0103%)  
NONO (0.0069%)  
FANCE (0.0069%)  
PAFAH1B2 (0.0069%)  
DDX5 (0.0069%)  
TMEM127 (0.0069%)  
PICALM (0.0103%)  
ARHGAP35 (0.0069%)  
ATF1 (0.0034%)  
RPL10 (0.0034%)  
RPL22 (0.0034%)  
SSX1 (0.0069%)  
HEY1 (0.0069%)  
SSX4 (0.0034%)  
MTCP1 (0.0034%)  
IRS4 (0.0034%)  
LMO1 (0.0034%)  
MLLT11 (0.0034%)  
ACVR1 (0.0034%)  
TCEA1 (0.0034%)  
HMGA2 (0.0034%)  
HLF (0.0034%)  
PRKACA (0.0034%)  
FHIT (0.0069%)  
FOXO4 (0.0069%)  
ZNF384 (0.0069%)  
TFG (0.0034%)  
CNBP (0.0034%)  
H3F3B (0.0034%)  
BCL2 (0.0034%)  
DEK (0.0034%)  
BCL10 (0.0034%)  
HOXA9 (0.0034%)  
FSTL3 (0.0034%)  
B2M (0.0034%)  
RHOA (0.0034%)  
TLX1 (0.0034%)  
PIM1 (0.0034%)  
JUN (0.0034%)  
DDIT3 (0.0034%)  
RHOH (0.0034%)  
CRTC3 (0.0034%)  
ZNF331 (0.0034%)  
ZBTB16 (0.0034%)  
SDHAF2 (0.0034%)  
CD74 (0.0034%)  
PAX3 (0.0034%)  
HOXA13 (0.0034%)  
MYC (0.0034%)  
ERC1 (0.0034%)