Top mutated genes (tier 1) of hepatocellular\_carcinoma cancer are (n=50):

Asia:  
TP53 (24.0876%)  
CTNNB1 (22.2628%)  
PIK3CA (6.9343%)  
BRAF (5.8394%)  
KEAP1 (1.8248%)  
AXIN1 (1.0949%)  
KRAS (1.0949%)  
AR (1.0949%)  
KDR (0.7299%)  
NFE2L2 (0.7299%)  
MAP2K4 (0.7299%)  
FHIT (0.7299%)  
PTEN (0.7299%)  
ARID2 (0.7299%)  
TOP1 (0.7299%)  
EGFR (0.7299%)  
MYO5A (0.7299%)  
BARD1 (0.365%)  
ACVR1B (0.365%)  
FSTL3 (0.365%)  
STK11 (0.365%)  
PTPRB (0.365%)  
LASP1 (0.365%)  
DCTN1 (0.365%)  
ERCC2 (0.365%)  
DNMT3A (0.365%)  
APC (0.365%)  
PREX2 (0.365%)  
CHD4 (0.365%)  
SMARCA4 (0.365%)  
KMT2A (0.365%)  
FLT4 (0.365%)  
ARHGAP26 (0.365%)  
TET2 (0.365%)  
GPC3 (0.365%)  
COL2A1 (0.365%)  
EXT1 (0.365%)  
EPAS1 (0.365%)  
HMGA2 (0.365%)  
LMO1 (0.365%)  
GRIN2A (0.365%)  
STAT3 (0.365%)  
MYH9 (0.365%)  
KDM5C (0.365%)  
KMT2C (0.365%)  
SET (0.365%)  
CNOT3 (0.365%)  
IKZF1 (0.365%)  
ZBTB16 (0.365%)  
CAMTA1 (0.365%)  
  
  
The world:  
TP53 (11.2452%)  
CTNNB1 (10.0567%)  
LRP1B (0.8733%)  
CAMTA1 (0.3781%)  
ARID1B (0.4051%)  
AXIN1 (1.8457%)  
PRDM16 (0.3331%)  
NCOR1 (0.2791%)  
ESR1 (0.1711%)  
ERBB4 (0.4142%)  
GAS7 (0.2521%)  
PTPRT (0.4051%)  
AFF3 (0.2071%)  
ARID2 (0.9814%)  
PAX5 (0.1531%)  
JAK2 (0.1711%)  
ARID1A (1.0624%)  
AFDN (0.1711%)  
PREX2 (0.7653%)  
ZFHX3 (0.4142%)  
ARHGAP26 (0.1711%)  
MLLT3 (0.2431%)  
FHIT (0.2161%)  
KMT2C (0.5942%)  
ABL1 (0.099%)  
EBF1 (0.2611%)  
PTPRK (0.3241%)  
ALK (0.4051%)  
JAK1 (0.3331%)  
ZNF521 (0.4322%)  
NTRK3 (0.4142%)  
SYK (0.108%)  
RABEP1 (0.072%)  
ROS1 (0.2701%)  
PIK3CA (0.6662%)  
PIK3R1 (0.1441%)  
NCOR2 (0.3421%)  
PTPRB (0.4682%)  
TSC2 (0.6302%)  
ITK (0.117%)  
GRIN2A (0.3511%)  
FLT3 (0.1531%)  
MAP2K4 (0.099%)  
NFE2L2 (0.5132%)  
NSD1 (0.2251%)  
GPHN (0.2881%)  
RNF213 (0.4051%)  
FAT4 (0.4142%)  
PDE4DIP (0.4322%)  
PTEN (0.4772%)  
ATM (0.4502%)  
SETD2 (0.4592%)  
FLT4 (0.3331%)  
APC (0.4051%)  
PTPN13 (0.3961%)  
KIT (0.3511%)  
CDH11 (0.3331%)  
HNF1A (0.3691%)  
RSPO3 (0.09%)  
SND1 (0.3601%)  
RB1 (0.4322%)  
RAD51B (0.2251%)  
NFIB (0.117%)  
KMT2D (0.4412%)  
GPC3 (0.2611%)  
LPP (0.2071%)  
FOXP1 (0.2251%)  
SMARCA4 (0.3421%)  
NF1 (0.3961%)  
SPEN (0.2521%)  
CBFA2T3 (0.1801%)  
MAML2 (0.2611%)  
CDKN2A (0.3871%)  
CUX1 (0.2701%)  
YWHAE (0.108%)  
ATR (0.3601%)  
RUNX1T1 (0.2701%)  
RANBP2 (0.2521%)  
EGFR (0.3511%)  
KMT2A (0.3601%)  
KEAP1 (0.3511%)  
CNTRL (0.1981%)  
POLQ (0.3151%)  
ERC1 (0.2431%)  
CREBBP (0.3601%)  
NOTCH2 (0.2431%)  
PTPRC (0.3061%)  
ERG (0.1981%)  
TRRAP (0.3061%)  
MSI2 (0.2251%)  
BRAF (0.3061%)  
UBR5 (0.2521%)  
FAT1 (0.2701%)  
CARD11 (0.2881%)  
TSC1 (0.2341%)  
GNAS (0.2161%)  
AXIN2 (0.2431%)  
CACNA1D (0.2521%)  
TET1 (0.2161%)  
NPM1 (0.045%)  
NOTCH1 (0.2791%)  
NCOA2 (0.2251%)  
IL6ST (0.2611%)  
QKI (0.099%)  
MYO5A (0.2071%)  
KAT6A (0.2341%)  
AFF1 (0.2251%)  
PBRM1 (0.2521%)  
PBX1 (0.1891%)  
TERT (0.2071%)  
KDR (0.2881%)  
TPR (0.2521%)  
NUP214 (0.2251%)  
EXT1 (0.1711%)  
GNAQ (0.117%)  
ATRX (0.2341%)  
TCF12 (0.1711%)  
TP63 (0.2071%)  
BRCA2 (0.2611%)  
FANCC (0.072%)  
FANCD2 (0.2341%)  
ARHGEF12 (0.2431%)  
USP6 (0.1441%)  
KTN1 (0.2071%)  
POLE (0.2161%)  
MYH9 (0.2341%)  
MYH11 (0.2161%)  
KRAS (0.2611%)  
NUP98 (0.2251%)  
MTOR (0.2611%)  
PAX7 (0.135%)  
TSHR (0.126%)  
SETBP1 (0.1891%)  
CDH1 (0.2341%)  
ASXL1 (0.2431%)  
EP300 (0.2521%)  
GOPC (0.036%)  
KAT6B (0.2161%)  
HIP1 (0.1711%)  
TBL1XR1 (0.1981%)  
ACVR2A (0.2431%)  
TCF7L2 (0.1711%)  
CLIP1 (0.1981%)  
KDM6A (0.1891%)  
BAP1 (0.2071%)  
SMARCB1 (0.2071%)  
BMPR1A (0.1531%)  
FOXO3 (0.108%)  
IKZF1 (0.2251%)  
RSPO2 (0.1531%)  
NFATC2 (0.1621%)  
FGFR1OP (0.126%)  
SMAD3 (0.1441%)  
EML4 (0.1621%)  
BLM (0.1981%)  
CRTC1 (0.135%)  
COL2A1 (0.2071%)  
CHEK2 (0.099%)  
PDGFRA (0.2161%)  
NSD2 (0.2071%)  
FBXW7 (0.1711%)  
CLTC (0.2071%)  
BCORL1 (0.1441%)  
IRS4 (0.1711%)  
MITF (0.1801%)  
RUNX1 (0.1891%)  
COL1A1 (0.1981%)  
NRG1 (0.1711%)  
SLC34A2 (0.1801%)  
RAP1GDS1 (0.1441%)  
BCR (0.1441%)  
AR (0.1981%)  
CD274 (0.036%)  
CLTCL1 (0.2071%)  
LRIG3 (0.1621%)  
FGFR4 (0.1801%)  
MECOM (0.2071%)  
PTCH1 (0.099%)  
ARNT (0.117%)  
IL21R (0.1981%)  
PRDM1 (0.135%)  
POT1 (0.1621%)  
LZTR1 (0.135%)  
MET (0.1711%)  
DICER1 (0.1891%)  
ARHGAP35 (0.1711%)  
DDX10 (0.108%)  
MLLT10 (0.1711%)  
WT1 (0.1711%)  
BCL2 (0.108%)  
CBLB (0.1531%)  
TET2 (0.1981%)  
PPFIBP1 (0.1441%)  
AKT2 (0.135%)  
AMER1 (0.1891%)  
NF2 (0.1621%)  
HNRNPA2B1 (0.117%)  
SDHB (0.054%)  
BCL11A (0.1621%)  
LEF1 (0.135%)  
MAP3K1 (0.126%)  
DNMT3A (0.1531%)  
PIK3CB (0.126%)  
DROSHA (0.1441%)  
BRCA1 (0.126%)  
WRN (0.1441%)  
GNA11 (0.099%)  
IDH1 (0.1891%)  
PAX3 (0.1711%)  
NCOA1 (0.126%)  
STRN (0.135%)  
ZNF331 (0.135%)  
TMPRSS2 (0.117%)  
MAPK1 (0.09%)  
EPS15 (0.1441%)  
NIN (0.1711%)  
SMAD4 (0.1621%)  
KNL1 (0.1441%)  
MSH2 (0.117%)  
BRIP1 (0.1621%)  
SMO (0.135%)  
ATP2B3 (0.1621%)  
CRTC3 (0.135%)  
ELL (0.099%)  
HMGA2 (0.099%)  
BCL9L (0.108%)  
BCL11B (0.1531%)  
JAK3 (0.1621%)  
NSD3 (0.126%)  
TRIM33 (0.108%)  
TNFAIP3 (0.072%)  
ABL2 (0.126%)  
LIFR (0.1531%)  
CYLD (0.117%)  
ZBTB16 (0.126%)  
BCL9 (0.117%)  
FGFR2 (0.1531%)  
FOXO1 (0.09%)  
FIP1L1 (0.135%)  
STAG2 (0.1621%)  
NT5C2 (0.117%)  
NTRK1 (0.135%)  
ZMYM2 (0.1441%)  
MSH6 (0.1621%)  
ERCC2 (0.1621%)  
MED12 (0.1531%)  
SF3B1 (0.1621%)  
AFF4 (0.117%)  
WIF1 (0.117%)  
FANCA (0.1531%)  
KLK2 (0.072%)  
DNM2 (0.117%)  
XPO1 (0.135%)  
MLLT1 (0.117%)  
MRTFA (0.099%)  
LATS1 (0.1531%)  
TRAF7 (0.135%)  
NUMA1 (0.1441%)  
ETV6 (0.117%)  
PPP6C (0.117%)  
IDH2 (0.1441%)  
RET (0.1531%)  
BCOR (0.1441%)  
ERBB3 (0.1441%)  
TRIM24 (0.099%)  
CDC73 (0.117%)  
NRAS (0.1441%)  
POLD1 (0.126%)  
CCDC6 (0.117%)  
SRC (0.108%)  
PER1 (0.09%)  
FLI1 (0.135%)  
LCK (0.108%)  
TRIP11 (0.117%)  
RECQL4 (0.135%)  
CDK12 (0.135%)  
KDM5C (0.117%)  
STIL (0.108%)  
ATP1A1 (0.126%)  
PDCD1LG2 (0.081%)  
CBL (0.126%)  
EXT2 (0.117%)  
HLA-A (0.108%)  
POU2AF1 (0.072%)  
SUFU (0.108%)  
DDX6 (0.099%)  
PICALM (0.099%)  
PLCG1 (0.126%)  
LATS2 (0.126%)  
USP8 (0.108%)  
MN1 (0.108%)  
TOP1 (0.117%)  
NUTM1 (0.108%)  
PCM1 (0.117%)  
KCNJ5 (0.099%)  
SH2B3 (0.09%)  
PSIP1 (0.081%)  
STK11 (0.108%)  
ERCC4 (0.126%)  
TCF3 (0.099%)  
CIC (0.117%)  
RNF43 (0.117%)  
ELF4 (0.108%)  
ASPSCR1 (0.117%)  
CTCF (0.117%)  
ACSL3 (0.09%)  
STAT3 (0.117%)  
LASP1 (0.09%)  
TPM4 (0.108%)  
SMAD2 (0.117%)  
IRF4 (0.108%)  
PRRX1 (0.126%)  
SUZ12 (0.099%)  
PRF1 (0.126%)  
EIF3E (0.108%)  
FBXO11 (0.117%)  
NR4A3 (0.108%)  
FGFR3 (0.117%)  
PTPN11 (0.108%)  
BARD1 (0.108%)  
MYB (0.117%)  
MAP2K1 (0.117%)  
CHD4 (0.117%)  
CDK6 (0.081%)  
ETV1 (0.081%)  
KDM5A (0.099%)  
BCL6 (0.09%)  
TENT5C (0.099%)  
IKBKB (0.108%)  
PPARG (0.099%)  
ABI1 (0.063%)  
EWSR1 (0.108%)  
RARA (0.099%)  
MALT1 (0.099%)  
ATIC (0.099%)  
KIF5B (0.09%)  
ERBB2 (0.099%)  
CANT1 (0.09%)  
DCTN1 (0.099%)  
XPC (0.09%)  
CASP8 (0.099%)  
SLC45A3 (0.081%)  
PDGFRB (0.099%)  
SS18L1 (0.09%)  
FGFR1 (0.099%)  
TGFBR2 (0.09%)  
HIF1A (0.099%)  
PPM1D (0.09%)  
BRD3 (0.09%)  
SH3GL1 (0.081%)  
MDM2 (0.09%)  
PAX8 (0.09%)  
TLX3 (0.081%)  
TBX3 (0.099%)  
BCL7A (0.081%)  
SDHA (0.081%)  
MAP3K13 (0.072%)  
MEN1 (0.081%)  
PMS2 (0.063%)  
CCNB1IP1 (0.063%)  
TFEB (0.081%)  
RAF1 (0.09%)  
PALB2 (0.081%)  
IKZF3 (0.072%)  
LMO2 (0.081%)  
STAT5B (0.081%)  
EPAS1 (0.081%)  
SALL4 (0.072%)  
BUB1B (0.063%)  
PML (0.09%)  
CCNE1 (0.045%)  
EIF4A2 (0.09%)  
BCL3 (0.054%)  
ERCC5 (0.09%)  
CALR (0.054%)  
CDKN1B (0.054%)  
FES (0.045%)  
EZR (0.072%)  
CIITA (0.081%)  
OLIG2 (0.081%)  
RPL22 (0.081%)  
CREB3L2 (0.054%)  
ACVR1 (0.072%)  
PRKACA (0.072%)  
ZRSR2 (0.081%)  
ETNK1 (0.072%)  
RHOH (0.081%)  
CREB3L1 (0.072%)  
SDC4 (0.045%)  
PLAG1 (0.063%)  
SPOP (0.072%)  
FUBP1 (0.081%)  
BRD4 (0.081%)  
FCRL4 (0.063%)  
HSP90AA1 (0.081%)  
PPP2R1A (0.081%)  
WAS (0.054%)  
ETV5 (0.072%)  
MUTYH (0.072%)  
FLCN (0.063%)  
TCEA1 (0.063%)  
KDSR (0.072%)  
BAX (0.072%)  
MAP2K2 (0.063%)  
DDR2 (0.072%)  
ERCC3 (0.072%)  
RAC1 (0.072%)  
TFE3 (0.054%)  
MLH1 (0.072%)  
EZH2 (0.072%)  
NDRG1 (0.063%)  
ACVR1B (0.054%)  
CSF3R (0.054%)  
WWTR1 (0.054%)  
RBM15 (0.054%)  
ELK4 (0.054%)  
TFG (0.054%)  
MYCL (0.063%)  
IL7R (0.063%)  
PHF6 (0.063%)  
REL (0.054%)  
KLF4 (0.045%)  
CDX2 (0.054%)  
SFRP4 (0.063%)  
HOOK3 (0.063%)  
CBLC (0.063%)  
NONO (0.045%)  
FOXO4 (0.054%)  
RAD21 (0.036%)  
FUS (0.063%)  
DDX5 (0.063%)  
HSP90AB1 (0.063%)  
JUN (0.054%)  
ACKR3 (0.063%)  
CCND2 (0.045%)  
BCL10 (0.054%)  
RPN1 (0.054%)  
AKT1 (0.027%)  
MLF1 (0.054%)  
TPM3 (0.045%)  
FANCE (0.054%)  
RHOA (0.045%)  
DDX3X (0.054%)  
PRCC (0.054%)  
NKX2-1 (0.045%)  
NBN (0.054%)  
GATA2 (0.054%)  
TAL1 (0.054%)  
TMEM127 (0.045%)  
DEK (0.054%)  
MYCN (0.054%)  
CNOT3 (0.054%)  
FOXL2 (0.054%)  
PRKAR1A (0.027%)  
STAT6 (0.054%)  
CD74 (0.009%)  
H3F3A (0.018%)  
MDM4 (0.045%)  
CNBP (0.036%)  
LMO1 (0.036%)  
GOLGA5 (0.045%)  
FOXA1 (0.045%)  
DDB2 (0.045%)  
HERPUD1 (0.036%)  
VHL (0.045%)  
APOBEC3B (0.045%)  
NUTM2D (0.045%)  
GATA3 (0.045%)  
CARS (0.045%)  
CCND1 (0.045%)  
CBFB (0.045%)  
FEV (0.036%)  
MYOD1 (0.036%)  
RBM10 (0.045%)  
MSN (0.045%)  
WDCP (0.045%)  
SET (0.036%)  
PTK6 (0.036%)  
BTK (0.045%)  
MYC (0.036%)  
TAL2 (0.018%)  
FH (0.036%)  
SDHAF2 (0.045%)  
DAXX (0.045%)  
SRSF2 (0.045%)  
HIST1H3B (0.045%)  
SMARCE1 (0.045%)  
XPA (0.036%)  
ZNF384 (0.036%)  
TRIM27 (0.027%)  
U2AF1 (0.036%)  
MAX (0.027%)  
B2M (0.036%)  
PDGFB (0.036%)  
PATZ1 (0.036%)  
RPL5 (0.036%)  
NAB2 (0.036%)  
PIM1 (0.036%)  
SSX1 (0.036%)  
SS18 (0.036%)  
LMNA (0.036%)  
CD79B (0.036%)  
CDKN2C (0.036%)  
SRSF3 (0.036%)  
HRAS (0.036%)  
MYD88 (0.036%)  
CXCR4 (0.036%)  
FANCF (0.036%)  
FANCG (0.027%)  
FSTL3 (0.027%)  
NUTM2B (0.027%)  
FCGR2B (0.027%)  
HMGA1 (0.027%)  
ETV4 (0.027%)  
BTG1 (0.027%)  
DNAJB1 (0.027%)  
SOX2 (0.027%)  
MPL (0.027%)  
ATF1 (0.027%)  
HLF (0.027%)  
CRLF2 (0.027%)  
P2RY8 (0.018%)  
GATA1 (0.018%)  
SDHC (0.027%)  
HOXC11 (0.027%)  
HOXA13 (0.027%)  
SIX1 (0.027%)  
CEBPA (0.027%)  
HIST1H4I (0.027%)  
DDIT3 (0.027%)  
KLF6 (0.027%)  
HOXA11 (0.027%)  
PHOX2B (0.027%)  
TNFRSF14 (0.018%)  
HOXD11 (0.018%)  
IL2 (0.018%)  
NFKBIE (0.018%)  
SDHD (0.018%)  
BIRC3 (0.018%)  
HEY1 (0.018%)  
RPL10 (0.018%)  
NFKB2 (0.018%)  
FAS (0.018%)  
CREB1 (0.018%)  
CCND3 (0.018%)  
SFPQ (0.018%)  
LYL1 (0.018%)  
H3F3B (0.018%)  
HOXA9 (0.018%)  
SOCS1 (0.018%)  
SSX4 (0.009%)  
HOXD13 (0.009%)  
PAFAH1B2 (0.009%)  
SBDS (0.009%)  
MUC1 (0.009%)  
MAFB (0.009%)  
TCL1A (0.009%)  
CD79A (0.009%)