



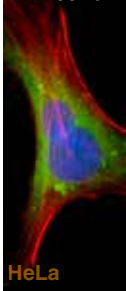
The Cancer Kinome

The phylogenetic tree illustrates the similarity between the protein sequences of the catalytic domains of the superfamily of 518 human protein kinases. The seven major groups are colored separately. TK - Tyrosine kinase; TKL - Tyrosine kinase-like; STE - Homologs of yeast Sterile 7, Sterile 11, Sterile 20 kinases; CK1 - Casein kinase 1; AGC - Containing PKA, PKG, PKC families; CAMK - Calcium/calmodulin-dependent protein kinase; CMGC - Containing CDK, MAPK, GSK3, CLK families. 187 protein kinases were found to be specific for variety of malignant tissues and are labeled in black. The inset diagram on the left shows the mRNA level of expression for 20 protein tyrosine kinases in six different malignant tissues.

Tyrosine kinase mRNA expression

Ant-FGFR2 antibody

AP7637b

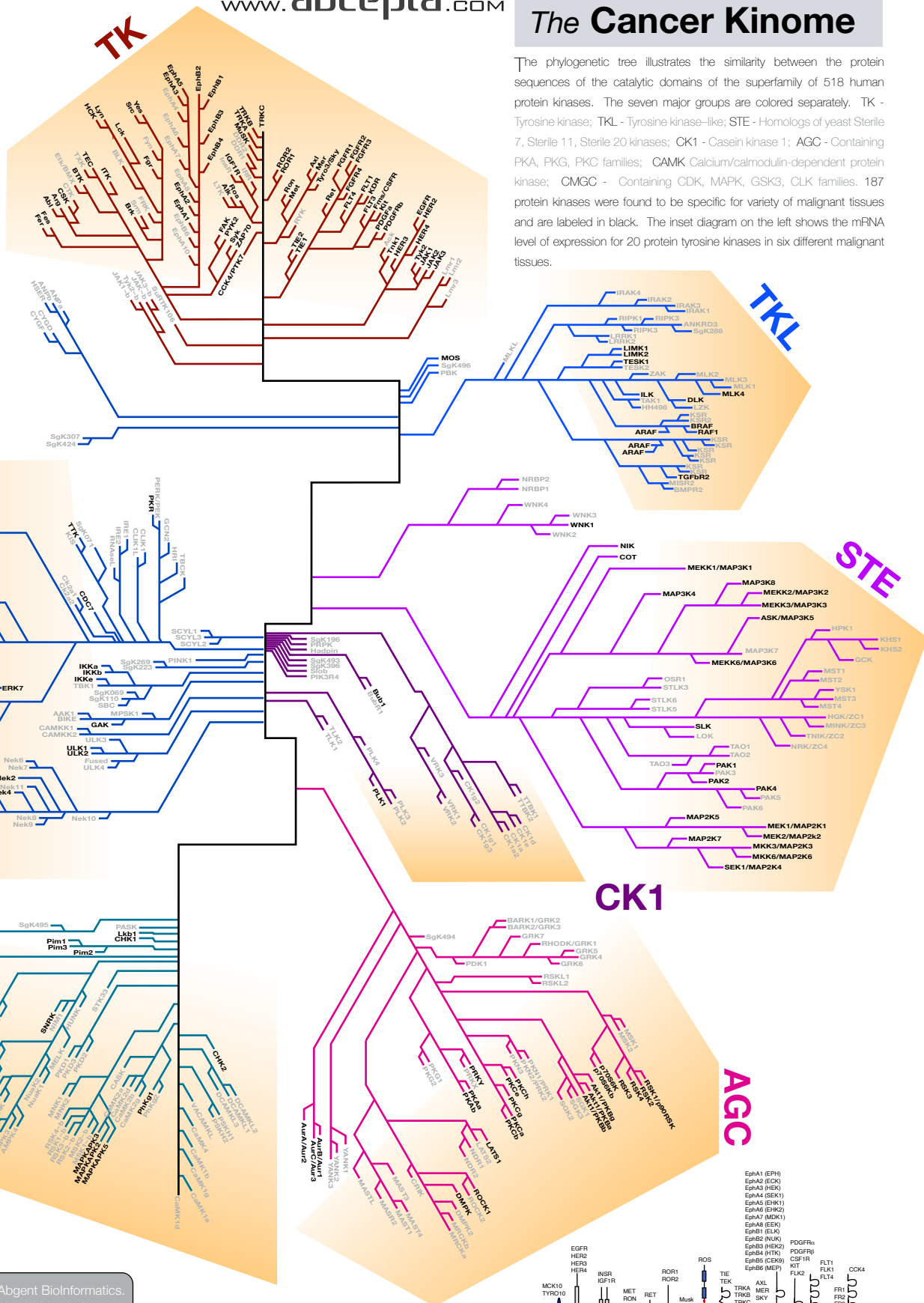


HeLa

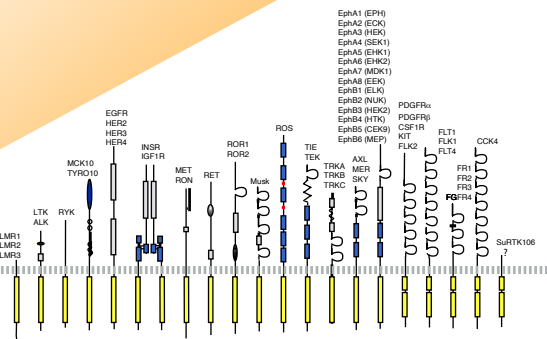
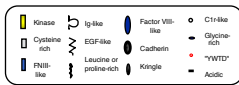
Tissue type

Acute Lymphoblastic Leukemia	ALL
Acute Promyelocytic Leukemia	APL
Burkitt's Lymphoma Daudi	BLD
Burkitt's Lymphoma Ramos	BLR
Hepatocellular carcinoma	HC
Lymph node melanoma	LNM

Name	Level	Tissue
LOK	High	ALL
FGFR4	High	HC
AXL	High	LNM
FGFR3	High	BLD
BTX	High	BLD
JAK1	High	BLD
FLT4	High	APL
SYK	High	BLD
SRC	High	ALL
JAK3	High	ALL
JAK2	High	APL
KDR	High	APL
FES	High	APL
FGFR2	High	APL
HCK	High	APL
FLT1	High	APL
INSR	High	APL
TIE	High	BLR
ALK	High	BLD
EGFR	High	HC



Receptor Tyrosine Kinases



References

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