

# Small cell lung cancer pathway, Collagen high vs low tumors

## SMALL CELL LUNG CANCER



Neuroendocrine epithelial cells

Pulmonary neuroendocrine epithelial cell

PHIT  $\rightarrow$  ?  $\rightarrow$  Reduced apoptosis  
Cell-cycle progression

Overexpression

Bcl-2

Mitochondrion

Bax

CytC

Apaf-1

Apoptosis

CASP9

CASP3

Inhibition of apoptosis

Genetic alterations

Oncogene : Myc

Tumor suppressors : RAR $\beta$ , FHIT, p53, RB, PTEN

Primary small cell carcinoma

ECM-receptor interaction

ECM

ITGA

ITGB

Focal adhesion

PTEN

PI3K-Akt signaling pathway

PI3K

FAK

PKB/Akt

IKK

I $\kappa$ B $\alpha$

NF- $\kappa$ B

Degradation

Metastatic small cell carcinoma

Data on KEGG graph  
Rendered by Pathview

