

# The NKi shRNALibrary



shRNA library targeting 8000 human genes

- Including:
- Cell cycle genes
  - Oncogenes and tumorsuppressor genes
  - Transcription factors
  - Kinases and phosphatases
  - Signal transduction
  - Chromatin structure (43 genes)
  - DNA repair and replication (71 genes)
  - Adhesion
  - Angiogenesis
  - Apoptosis
  - Genes implicated hereditary cancer
  - Genes implicated drug response
  - Disease genes
  - etc.....



Generated 3 different shRNA constructs  
against each gene

24.000 unique 19<sub>mer</sub> sequences

24.000 pRETROSUPER shRNA constructs

48.000 59<sub>mer</sub> oligos (~ 500 96 well plates oligos)



~ 80 96 well plates with bacterial glycerol stocks:

- each well 1 gene (3 shRNA constructs)
- each plate 96 genes (288 shRNA constructs)
- 24.000 shRNA constructs ( 8000 wells)



DNA isolated from :

- single well / single gene (8000)
- per 96 well plate (~ 80 pools of 96 genes)
- subsets of genes of interest (gene families)
- total library