

Single-stranded, Blue-labeled cDNA from normal cells

Copy on BLUE colored paper or cardstock.

Cut out each cDNA.

Combine these cDNAs with one sheet of the red cDNA from tumor cells.

CATCGGAAC
CATCGGAAC
CCGGGAAATT
GTAAAATTT
GTAGGAATAT
GCGCGCCCGCG
GTAGGAATAT
ATTTAACAGTT

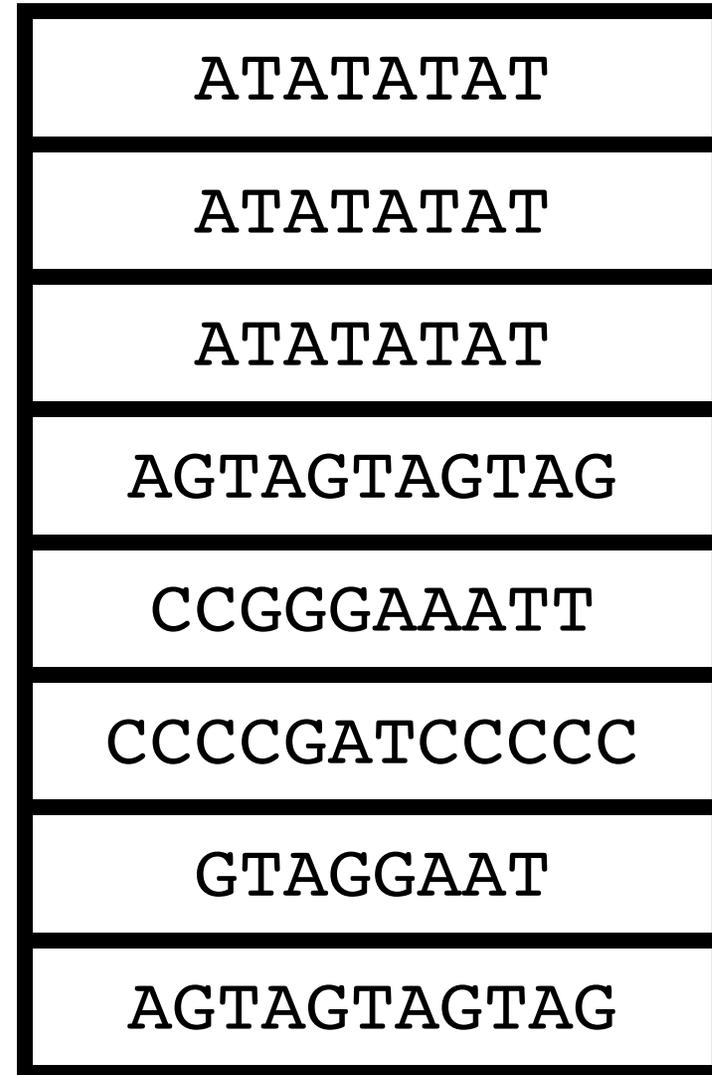
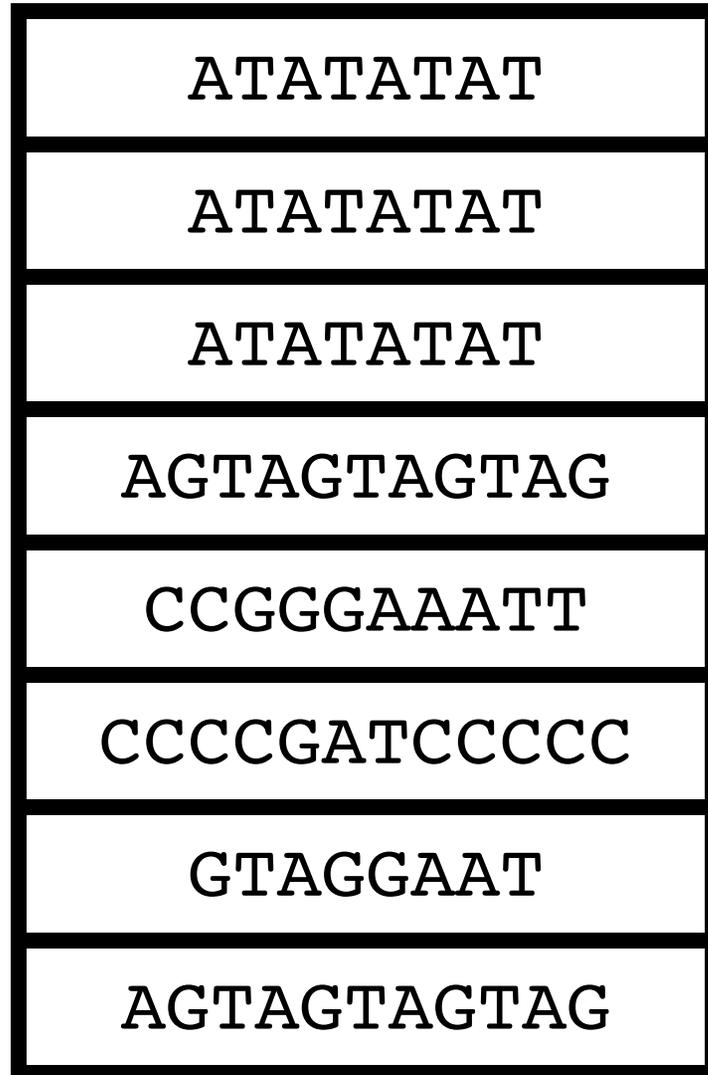
CATCGGAAC
CATCGGAAC
CCGGGAAATT
GTAAAATTT
GTAGGAATAT
GCGCGCCCGCG
GTAGGAATAT
ATTTAACAGTT

Single-stranded, Red-labeled cDNA from abnormal tumor cells

Copy on RED colored paper or cardstock.

Cut out each cDNA.

Combine these cDNAs with one sheet of the blue cDNA from normal cells.



1

GGGTAGCCTTGG

2

CATGCATCCATG

3

GGGGCCCTTTAA

4

GCATTTTAAAGG

5

CCATCCTTATAG

6

TATATATATATA

Teacher Answer Key

GGGTAGCCTTGG

BLUE
highly expressed in normal cells only (4X)

CATGCATCCATG

BLACK
NOT expressed in either cells

GGGGCCCTTTAA

PURPLE
(constitutively) expressed equally in
normal and cancer cells (2X)

Teacher Answer Key

GCATTTTAAAGG

LIGHT BLUE
expressed in normal cells only (2X)

CCATCCTTATAG

PURPLE/BLUE
expressed in normal cells (4X)
and cancer cells (2X)

TATATATATATA

RED
highly expressed in cancer cells only (6X)