

# Reference Genome

ACTCCCGTCGGAACGAATGCCACG

## Normal

Allelic Counts

$a_N$

$d_N$

ACTCCCGTCGGAACCAATGCC - -  
 -CTCCCGTCGGAACCAATGCCAC  
 ---CCCGTCGGAACCAATGCCACG  
 -----CGTCGGAACCAATGCCACG  
 -----CATCGGAACCAATGCCAC  
 -----GTCGGAACCAATGCCACG  
 -----CAATGCCAC  
 -----CACC

122335566666660777778773  
 122335666666667777778777

## Tumour

Allelic Counts

$a_T$

$d_T$

ACTCCCGTCGGAACCAATGCCAC  
 --TCCCGTCGGAACCAATGCCAC  
 ---CCCGTCGGAACCAATGCCAC  
 -----GTCGGCACCAATGCCACG  
 -----CGGCACCAATGCCACG  
 -----GCACCAATGCCACG  
 -----AATGCCACG  
 -----CCACG

112333445563660777788883  
 112333445566666777788888



Germline



Somatic

(AA,AB)

(BB,BB)

(AB,AB)

$$P(G_{(g_N, g_T)}^i = 1)$$

## Joint Genotype Probabilities

$g_N \backslash g_T$	AA	AB	BB
AA	0.01	0.95	0.00
AB	0.00	0.04	0.00
BB	0.00	0.00	0.00