**TATA ACAC**

**AGAG AGCAGC CCC**

**112323423411112234563412234231211 right end trim**

**CTTTATAGAGCATAAGCAGCGCAACACCCTTAT**

**132432432111126543432124323212111 left end trim**

**read agagCATAAGCAGCGCAacac (lowercase = trimmed)**

**CTTTATAGAGCATAAGCAGCAGCGCAACACCCTTAT mutation**

**CTTTATAGAGCATA---AGCAGCGCAACACCCTTAT reference**

**CTTTATAGAGCATA---A read 1 → no end trimming**

**CTTTATAGAGCATA---AGCAG read 2 →**

**AGAGCATAAGCAGCAGCGCAA read 3 →**

**CATAAGCAGCAGCGCAACACCCTTAT read 4 ←**

**AGCAGCGCAACACCCTTAT read 5 ←**

**AGCGCAACACCCTTAT read 6 ←**

**CTTTATAGAGCATaa read 1 → with end trimming**

**CTTTATAGAGCATAagcag read 2 →**

**agagCATAAGCAGCAGCGCaa read 3 →**

**cATAAGCAGCAGCGCAACACCCTTAT read 4 ←**

**agcagcGCAACACCCTTAT read 5 ←**

**agcGCAACACCCTTAT read 6 ←**