

paired-end RNA-seq (simplification)

messenger RNA

5' - **AUG**UCGGUCAGCUCGAGCCGCAGCAGAUGAGCAGCUAGCUAA - 3'



double-stranded DNA (synthetic)

5' - **ATGTCGGTCAGCTCGAGCCGCAGCAGATGAGCAGCTAGCTAA** - 3'

3' - **TACAGCCAGTCGAGCTCGGCCGTCTACTCGTCGATCGATT** - 5'

double-stranded DNA (synthetic)

5' -ATGTCGGTCAGCTCGAGCCGCAGCAGATGAGCAGCTAGCTAA-3'

3' -TACAGCCAGTCGAGCTCGGGCGTCTACTCGTCGATCGATT-5'

strandSpecific = 0

reads_?.fastq

5' -ATGTCGGTCAGCTCG-3'

reads_?.fastq

3' -ACTCGTCGATCGATT-5'

strandSpecific = 1

reads_1.fastq

5' -ATGTCGGTCAGCTCG-3'

reads_2.fastq

3' -ACTCGTCGATCGATT-5'

strandSpecific = 2

reads_2.fastq

5' -ATGTCGGTCAGCTCG-3'

reads_1.fastq

3' -ACTCGTCGATCGATT-5'

IGV: Color Alignments by first-of-pair strand

`strandSpecific = 1 AND gene in DNA strand (+)`

first-of-pair

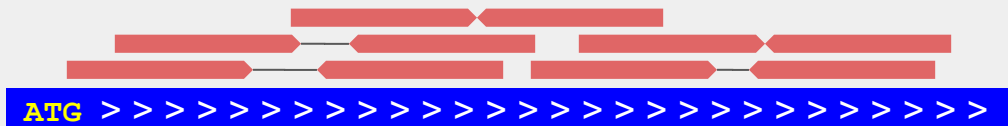


reads_1.fastq

5' -ATGTCGGTCAGCTCG-3'

reads_2.fastq

5' -TTAGCTAGCTGCTCA-3'



`strandSpecific = 1 AND gene in DNA strand (-)`

reads_2.fastq

5' -TTAGCTAGCTGCTCA-3'

reads_1.fastq

5' -ATGTCGGTCAGCTCG-3'

first-of-pair

