MARS-seq 1

# http://dors.weizmann.ac.il/course/course2018/AnalysingRNA-SeqdataproducedbyMars-Seqprotocol.pdf

# Read #1

@NB501779:144:HWHGFBGX9:1:11101:17900:1069 1:N:0:0

# ACAACAGAGCATATGCTGCCAGTAGCATATGCTTGTCTCAAAGATTAAGCCATGCATGTCTAAGTACGCACGGCC

# ACA adapter (3bp)

# ACAG pool barcode (4bp)

# AGCATATGCTGCCAGTAGCATATGCTTGTCTCAAAGATTAAGCCATGCATGTCTAAGTACGCACGGCC

# Read #2

@NB501779:144:HWHGFBGX9:1:11101:17900:1069 2:N:0:0

# AAAAGAGAAAANNNN

# AAAAGAG Cell barcode (7bp)

# AAAANNNN UMI (8bp)

10X Chromium v2

# https://support.10xgenomics.com/single-cell-gene-expression/sequencing/doc/specifications-sequencing-requirements-for-single-cell-3

# Read 1 is used to sequence the 16 bp 10x Barcode and 10 bp UMI

# @NS500606:299:H2HTJBGXC:1:11101:18584:1066 1:N:0:GGTTTACT

# i7 index (8bp)

# AGGTAGGNTGAGACGTCAGATATGTC # 26 bp

# AGGTAGGNTGAGACGT # 10x barcode (16bp)

# CAGATATGTC # UMI (10bp)

# Read 2 is used to sequence the cDNA fragment.

# @NS500606:299:H2HTJBGXC:1:11101:18584:1066 2:N:0:GGTTTACT

# CTTTTTTATCCTTNNCNNANNNNNTNNTTAGNNCTTTCCNATGNANNGANNNCNCNT

Converted

# Read #1

@NB501779:144:HWHGFBGX9:1:11101:17900:1069 1:N:0:0:GGTTTACT (i7 index) ACAGAAAAGAGAAAANNNN

+

/A//////E6E####

# Read #2

@NB501779:144:HWHGFBGX9:1:11101:17900:1069 2:N:0:0:GGTTTACT (i7 index)

AGCATATGCTGCCAGTAGCATATGCTTGTCTCAAAGATTAAGCCATGCATGTCTAAGTACGCACGG

+

EEEEEEEEEEEEEEE#EEEEEEEEEA//#/#//////////#/////////#/////#/##/#//#//