## Data analysis procedure for SMURF-seq reads

## 1 Introduction

At this point, we assume that the reads generated from a SMURF-seq experiment are base-called and are in a fastq or fasta file.

## 2 Mapping SMURF-seq reads

## **Environment variables:**

- 2.1 Prerequisites
- 2.2 Mapping SMURF-seq reads with BWA-MEM
- 2.3 Mapping SMURF-seq reads with Minimap2
- 2.4 Mapping SMURF-seq reads with LAST
- 2.5 Test data
- **3** Generation of copy-number profiles
- 3.1 Prerequisites
- 3.2 Generating CNV profiles
- 3.3 Test data
- 4 Miscellaneous analysis of sequenced reads and mapped fragments
- 4.1 Read length distribution
- 4.2 Fragment length distribution
- 4.3 Closeness to RE sites