

# Filter BAM/SAM Files Element

Filters BAM/SAM files using SAMTools view.

## Parameters in GUI

| Parameter               | Description                                                                                                                                                                                                                                                                                              | Default value |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Output directory</b> | Select an output directory. Custom - specify the output directory in the 'Custom directory' parameter. Workflow - internal workflow directory. Input file - the directory of the input file.                                                                                                             |               |
| <b>Custom directory</b> | Custom output directory.                                                                                                                                                                                                                                                                                 |               |
| <b>Output name</b>      | A name of an output BAM/SAM file. If default of empty value is provided the output name is the name of the first BAM/SAM file with .filtered extention.                                                                                                                                                  |               |
| <b>Output format</b>    | Format of an output assembly file.                                                                                                                                                                                                                                                                       | bam           |
| <b>Region</b>           | Regions to filter. For BAM output only. chr2 to output the whole chr2. chr2:1000 to output regions of chr 2 starting from 1000. chr2:1000-2000 to ouput regions of chr2 between 1000 and 2000 including the end point. To input multiple regions use the space seprator (e.g. chr1 chr2 chr3:1000-2000). |               |
| <b>MAPQ threshold</b>   | Minimum MAPQ quality score.                                                                                                                                                                                                                                                                              | 0             |
| <b>Skip flag</b>        | Skip alignment with the selected items. Select the items in the combobox to configure bit flag. Do not select the items to avoid filtration by this parameter.                                                                                                                                           |               |

## Parameters in Workflow File

Type: filter-bam

| Parameter  | Parameter in the GUI | Type    |
|------------|----------------------|---------|
| out-mode   | Output directory     | numeric |
| custom-dir | Custom directory     | string  |
| out-name   | Output name          | string  |
| out-format | Output format        | string  |
| region     | Region               | string  |
| mapq       | MAPQ threshold       | numeric |
| flag       | Skip flag            | string  |

## Input/Output Ports

The element has 1 *input port*:

**Name in GUI:** BAM/SAM File

**Name in Workflow File:** in-file

**Slots:**

| Slot In GUI | Slot in Workflow File | Type   |
|-------------|-----------------------|--------|
| Source URL  | input-url             | string |

And 1 *output port*:

**Name in GUI:** Filtered BAM/SAM files

**Name in Workflow File:** out-file

**Slots:**

| Slot In GUI | Slot in Workflow File | Type          |
|-------------|-----------------------|---------------|
| Source URL  | output-url            | <i>string</i> |