## Search for TFBS with SITECON Element

Searches each input sequence for transcription factor binding sites significantly similar to specified SITECON profiles. In case several profiles were supplied, searches with all profiles one by one and outputs merged set of annotations for each sequence.

Element type: sitecon-search

## Parameters

| Parameter | Description | Default value | Parameter <br> in <br> Workflow File | Type |
| :---: | :---: | :---: | :---: | :---: |
| Result annotation | Name of the result annotations. | misc_featu re | result-name | string |
| Search in | Specifies which strands should be searched: direct, complement or both. | both strands | strand | numeric <br> Available values are: <br> - 0 - for searchin $g$ in both strands <br> - 1 - for searchin $g$ in direct strand <br> - 2 - for searchin $g$ in comple ment strand |
| Min score | Recognition quality threshold, should be less than $100 \%$. Choosing too low threshold will lead to recognition of too many TFBS recognised with too low trustworthiness. Choosing too high threshold may result in no TFBS recognised. | 85 | min-score | numeric |
| Min err1 | Alternative setting for filtering results, minimal value of Error type I. Note that all thresholds (by score, by err1 and by err2) are applied when filtering results. | 0.0 | err1 | numeric |
| Max err2 | Alternative setting for filtering results, max value of Error type II. Note that all thresholds (by score, by err1 and by err2) are applied when filtering results. | 0.001 | err2 | numeric |

## Input/Output Ports

The element has 2 input ports. The first port:

## Name in GUI: Sequence

Name in Workflow File: in-sequence

Slots:

| Slot In GUI | Slot in Workflow File | Type |
| :--- | :--- | :--- |
| Sequence | sequence | sequence |

The second input port gets the SITECON model:
Name in GUI: Sitecon model

Name in Workflow File: in-sitecon
Slots:

| Slot In GUI | Slot in Workflow File | Type |
| :--- | :--- | :--- |
| Sitecon model | sitecon-model | sitecon-model |

And there is 1 output port:
Name in GUI: Sitecon annotations

Name in Workflow File: out-annotations
Slots:

| Slot In GUI | Slot in Workflow File | Type |
| :--- | :--- | :--- |
| Set of annotations | annotations | annotation-table |

