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.

Parameters in GUI

Parameter	Description	Default value
Result annotation	Name of the result annotations.	misc_feature
Search in	Specifies which strands should be searched: direct, complement or both.	both strands
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 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
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

Parameters in Workflow File

Type: sitecon-search

Parameter	Parameter in the GUI	Type
result-name	**Result annotation**	*string*
strand	**Search in**	*numeric* Available values are: • 0 - for searching in both strands • 1 - for searching in direct strand • 2 - for searching in complement strand
min-score	**Min score**	*numeric*
err1	**Min err1**	*numeric*
err2	**Max 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*