## **Find Pattern Element**

Searches regions in a sequence similar to a pattern sequence. Outputs a set of annotations.

## Parameters in GUI

Parameter	Description	Default value
Annotate as	Name of the result annotation.	misc_feature
Pattern(s)	Semicolon-separated list of patterns to search for.	
Pattern file	Load pattern from file in any sequence format or in newline-delimited format.	
Use pattern name	If patterns are loaded from a file, use names of pattern sequences as annotation names. The name from the parameters is used by default.	False
Max Mismatches	Maximum number of mismatches between a substring and a pattern.	0
Search in	Specifies which strands should be searched: direct, complementary or both.	both strands
Allow Insertions /Deletions	Takes into account possibility of insertions/deletions when searching. By default substitutions are only considered.	False
Support ambiguous bases	Performs correct handling of ambiguous bases. When this option is activated insertions and deletions are not considered.	False
Search in Translation	Translates a supplied nucleotide sequence to protein and searches in the translated sequence.	False
Qualifier name for pattern name	Name of qualifier in result annotations which is containing a pattern name.	pattern_na me

## Parameters in Workflow File

Type: search

Parameter	Parameter in the GUI	Туре	
result-name	Annotate as	string	
pattern	Pattern(s)	string	
pattern_file	Pattern file	string	
use-names	Use pattern name	boolean	
max-mismatches-num	Max Mismatches	numeric	
strand	Search in	numeric	
		Available values are:	
		<ul> <li>0 - for searching in both strands</li> <li>1 - for searching in direct strand</li> <li>2 - for searching in complement strand</li> </ul>	
allow-ins-del	Allow Insertions/Deletions	boolean	
ambiguous	Support ambiguous bases	boolean	
amino	Search in Translation	boolean	
pattern-name-qual	Qualifier name for pattern name	string	

## Input/Output Ports

The element has 1 input port.

Name in GUI: Input data

Name in Workflow File: in-sequence

Slots:

Sequence	sequence	sequence
Plain text	text	string

And 1 output port.

Name in GUI: Pattern annotations

Name in Workflow File: out-annotations

Slots:

Slot In GUI	Slot in Workflow File	Туре
Set of annotations	annotations	annotation-table