

# HMM3 Search Element

Searches each input sequence for significantly similar sequence matches to all specified HMM profiles. In case several profiles were supplied, searches with all profiles one by one and outputs united set of annotations for each sequence.

## Parameters in GUI

Parameter	Description	Default value
<b>Result annotation</b>	Name of the result annotations.	hmm_signal
<b>Seed</b>	Random generator seed. 0 - means that one-time arbitrary seed will be used.	0
<b>Filter by high E-value</b>	E-value filtering can be used to exclude low-probability hits from result.	1e-1
<b>Filter by low score</b>	Score based filtering is an alternative to E-value filtering to exclude low-probability hits from result.	0.01

## Parameters in Workflow File

**Type:** hmm3-search

Parameter	Parameter in the GUI	Type
result-name	Result annotation	<i>string</i>
seed	Seed	<i>numeric</i>
seqs-num	Number of seqs	<i>numeric</i>
score	Filter by low score	<i>numeric</i>

## Input/Output Ports

The element has 2 *input port*. The first gets the input sequence:

**Name in GUI:** *Input sequence*

**Name in Workflow File:** in-sequence

**Slots:**

Slot In GUI	Slot in Workflow File	Type
Sequence	sequence	<i>sequence</i>

The second input port gets the HMM profile:

**Name in GUI:** *HMM3 profile*

**Name in Workflow File:** in-hmm3

**Slots:**

Slot In GUI	Slot in Workflow File	Type
HMM profile	hmm3-profile	<i>hmm3-profile</i>

And 1 *output port*:

**Name in GUI:** *HMM3 annotations*

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

**Slots:**

Slot In GUI	Slot in Workflow File	Type
Set of annotations	annotations	<i>annotation-table</i>