Convert Frequency Matrix Element

Converts a frequency matrix to a weight matrix. Weight matrices are used for probabilistic recognition of transcription factor binding sites.

Parameters in GUI

Parameter	Description	Default value
Matrix type (required)	Dinucleic matrices are more detailed, while mononucleic one are more useful for small input data sets.	Mononucleic
Weight algorithm	Different weight algorithms uses different functions to build weight matrices. It allows us to get better precision on different data sets. Log-odds, NLG and Match algorithms are sensitive to input matrices with zero values, so some of them may not work on those matrices.	Berg and Von Hippel

Parameters in Workflow File

Type: fmatrix-to-wmatrix

Parameter	Parameter in the GUI	Type
type	**Matrix type**	*boolean* Available values are: • true - for Dinucleic • false - for Mononucleic
weight-algorithm	**Weight algorithm**	*string* Available values are: • Berg and von Hippel • Log-odds • Match • NLG

Input/Output Ports

The element has 1 *input port*:

Name in GUI: *Frequency matrix*

Name in Workflow File: in-fmatrix

Slots:

Slot In GUI	Slot in Workflow File	Type
Frequency matrix	**fmatrix**	*fmatrix*

And 1 *output port*:

Name in GUI: *Weight matrix*

Name in Workflow File: out-wmatrix

Slots:

Slot In GUI	Slot in Workflow File	Type
Weight matrix	**wmatrix**	*wmatrix*