Primer Algorithm Element

The *element* searches primers against the input sequence.

Parameters in GUI

Parameter	Description	Default value
Annotate As	Name of the result annotations.	top primers
Direction	See the description *here*.	Any
Excluded regions	The regions should be avoided for primer selection.	No default value.
Max repeat mispriming	The maximum allowed weighted similarity with any sequence in Mispriming Library.	12
Max template mispriming	The maximum allowed similarity to ectopic sites in the sequence from which you are designing the primers.	12
Number to return	The maximum number of primer pairs to return.	5
Pair max repeat mispriming	The maximum allowed sum of similarities of a primer pair (one similarity for each primer) with any single sequence in Mispriming Library.	24
Pair max template mispriming	The maximum allowed summed similarity of both primers to ectopic sites in the sequence from which you are designing the primers.	24
Product size ranges	List of product size ranges. Primer first tries to pick primers in the first range. If that is not possible, it goes to the next range and tries again. It continues in this way until it has either picked all necessary primers or until there are no more ranges.	150-200 100-300 301-400 401-500 501-600 601-700 701-850 851-1000
Max 3' stability	The maximum stability for the last five 3' bases of a left or right primer. Bigger numbers mean more stable 3' ends.	9
Targets	If one or more Targets is specified then a legal primer pair must flank at least one of them.	No default value.

Parameters in Schema File

Type: primer

Parameter	Parameter in the GUI	Type
key	**Annotate As**	*string*
excluded_regions	**Excluded region**	*string*
max_mispriming	**Max repeat mispriming**	*numeric*
max_template_mispriming	**Max template mispriming**	*numeric*
num_return	**Number to return**	*numeric*

pair_max_mispriming	**Pair max repeat mispriming**	*numeric*
pair_max_template_mispriming	**Pair max template mispriming**	*numeric*
size_ranges	**Product size range**	*string*
stability	**Max 3’ stability**	*numeric*
targets	**Targets**	*string*