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# **Pimer-BLAST-DX Documentation**

***Release 0.1***

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**Mar 01, 2018**



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# CHAPTER 1

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## primer\_blast\_dx

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### 1.1 primer\_blast\_dx package

#### 1.1.1 Subpackages

primer\_blast\_dx.designPrimers package

##### Submodules

primer\_blast\_dx.designPrimers.createBetterResult module

primer\_blast\_dx.designPrimers.findPrimers module

primer\_blast\_dx.designPrimers.findPrimersFile module

primer\_blast\_dx.designPrimers.findPrimersFromTask module

primer\_blast\_dx.designPrimers.transformInput module

##### Module contents

primer\_blast\_dx.specCheck package

##### Submodules

primer\_blast\_dx.specCheck.getMaskedSeq module

primer\_blast\_dx.specCheck.getOfftargetAttrs module

primer\_blast\_dx.specCheck.getTargetAttrs module

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primer\_blast\_dx.specCheck.specCheck module

##### Module contents

result: primer3 result

**Returns:** better result

`primer_blast_dx.findPrimers(inputData, resultFormat='better')`  
return primer3 result with given format Args:

inputData: input data resultFormat: result format (raw/better)

**Returns:** result

`primer_blast_dx.findPrimersFile(taskPath, taskResultPath)`  
find primers from the task file and store the result to a task result file Args:

taskPath: location of the task file taskResultPath: location of the task result file to store

`primer_blast_dx.findPrimersFromTask(task)`  
return primer3 result from task. Checks exception Args:

inputData: input data

**Returns:** task result

`primer_blast_dx.get_masked_seq(primer_seq, genome_seq)`

`primer_blast_dx.get_offtarget_attrs(off_target, side, idx, data, side_cols, target_cols, pysam_fasta)`

`primer_blast_dx.get_target_attrs(target, side, idx, data, side_cols, target_cols, pysam_fasta)`

`primer_blast_dx.run(task)`  
run findPrimers and specCheck Args:  
task (dic): task data saveTmp (bool): true if user wants to save temporary files

**Returns:** dic: result dictionary

`primer_blast_dx.specCheck(task, taskResult)`  
Dealing with input files both task and task results

`primer_blast_dx.transformInput(data)`  
separate input to seq\_args and global\_args Args:

data: input data

**Returns:** separated input data





## CHAPTER 2

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### Indices and tables

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