# **DNA/Clone search and results**

## Using the DNA Search

The DNA Search provides three ways of searching for DNA resources: A simple search by name only, complex search using more limits, and search by position. These are offered in three distinct sections of the window. Depending upon the TYPE of DNA you search for different feature parameters will be displayed. If you are looking for stocks (including libraries, antibodies etc... please try the ABRC or RIKEN stock centers.

#### Search for

The drop down menu allows you to choose they type of DNA to search. The following table lists the types of DNA you can retrieve with this search along with their definitions. For help with feature parameters for specific DNA types, click the corresponding link to show features.

DNA Type	Definition	Feature Parameters
clone	A section of DNA that has been inserted into a vector molecule, such as a plasmid or a phage or yeast chromosome, and then replicated to form many identical copies.	show features
vector	In DNA cloning, the plasmid or phage chromosome used to carry the cloned DNA segment. Also refers to the plasmids used to transform a plant.	show features

## Search by Name

Depending on the type of DNA you are searching for you can search with up to three of the following names/descriptions. Each name/description will be treated as a logical and. For example, a search for clone name =pROC + donor name = Ecker will find all clones named pROC that were donated by Joe Ecker.

Option	Definition	for which DNA type	Name help
clone name	the name of the clone	clone	Help
gene name	name of the gene associated to the clone	clone	
clone end name	name of the clone end	clone,	
locus name	chromosome based name for genomic sequence corresponding to a transcribed unit	clone	Help
GenBank Accession	unique identifier for a sequence entry in GenBank	clone	Help
Vector Name	name of the vector	vector	

### **Features**

The Restrict by Features options are below the Search by Name options on the DNA Search window. All the options in this section are an 'AND' operation. If the name input box is left blank, the software searches all the entries in the database matching the selected criteria. The following features are available for searching. Note not all features are available for all types of searches.

#### Vector type

Use this field to limit your search to one or more types of cloning vector. To select multiple vectors: select and press the APPLE key +mouse click (MAC) or press CTRL+ mouse click (PC). Choosing any will include all types of vectors in the results.

Used for clone, clone end, libary and vector searches.

#### Insert type

Use this field to limit your search to clones, clone ends, vectors and libraries containing specific types of DNA inserted into the cloning vector. To select multiple insert types: select and press the APPLE key +mouse click (MAC) or press CTRL+ mouse click (PC). Choosing any will include all insert types in the results.

Used for clone, clone end, vector and library searches.

### Clone end type

Use this field to limit your search to clones and clone ends having a specific type of end. To select types: select and press the APPLE key +mouse click (MAC) or press CTRL+ mouse click (PC). Choosing any will include all types in the results.

Used for clone and clone end searches

#### Other features

Use these parameters to limit your search to include one or more of these features. To select multiple: select and press the APPLE key +mouse click (MAC) or press CTRL+ mouse click (PC).

Feature	Usage	Available searches
is sequenced	Restrict the search to only entries with sequence data. For example, to find an EST or BAC clone with sequence.	clone, clone end
is genetic marker	Restrict your search to clones and clone ends that are genetic markers. For example to find clones used as RFLP markers.	clone, clone end
is on a map	Restrict your search to clones and clone ends that have been placed on a sequence, genetic or physical map.	clone, clone end
is full length cDNA	Restrict your search to include only clones that contain full length cDNAs.	clone

## Restrict by Map Location

This section lets you restrict your search by location on the reference genome map.

#### Chromosome

Lets you limit your search to a single chromosome. There are five nuclear chromosomes in *Arabidopsis*: 1, 2, 3, 4, and 5. You can also search the chloroplast and mitochondrial genomes.

### Range

Lets you specify a range search by the upper and lower bounds on the reference genome. The value is interpreted based on the selected in kilobase pairs.