

Restriction Analysis

From this chapter you can learn how to search for restriction sites on a DNA sequence.

The restriction sites found are stored as automatic annotations. This means that if the automatic annotations highlighting is enabled then the restriction sites are searched and highlighted for each nucleotide sequence opened. Refer [Automatic Annotations Highlighting](#) to learn more.

Open a DNA sequence in and click the following button on the *Sequence View* toolbar:



Alternatively, select either the *Actions Analyze Find restriction sites* item in the main menu or the *Analyze Find restriction sites* item in the context menu.

The *Find restriction sites* dialog appears:

Find Restriction Sites

Filter by name:

| Name | Accession | Type | Sequence | Organizm / Details |
|--------------|-----------|------|----------|----------------------|
| ▷ A (0, 264) | | | | Aaal .. Axml |
| ▷ B (2, 917) | | | | Bacl .. BvuBI |
| ▷ C (1, 193) | | | | Cacl .. CvnI |
| ▷ D (1, 31) | | | | Daql .. Dsp1I |
| ▷ E (2, 325) | | | | Eacl .. EspHK30I |
| ▷ F (0, 63) | | | | F-CphI .. F-TevIV |
| ▷ G (0, 23) | | | | Gall .. Gsul |
| ▷ H (1, 312) | | | | H-DreI .. Hsul |
| ▷ I (0, 61) | | | | I-AchMI .. I-Vdi141I |

Open enzymes

Export enzymes

Select All

Select None

Select by length

Invert selection

Load selection

Save selection

REBASE Info

Selected enzymes:

BamHI,BglII,ClaI,DraI,EcoRI,EcoRV,HindIII,PstI,Sall,SmaI,XmaI

☐ Filter by number of results:

Minimum hits: 1

Maximum hits: 2

Search in:

Region Whole sequence

1 - 199950

☐ Exclude

1 - 199950

Total number of enzymes: 4862, selected 11

Help

Cancel

OK

You can see the list of restriction enzymes that can be used to search for restriction sites. Also you can set a region to search for. The information about enzymes was obtained from the [REBASE](#) database. For each enzyme in the list a brief description is available (the accession ID in the database, the recognition sequence, etc.). If you're online you can get more detailed information about an enzyme selected by clicking the *REBASE Info* button.

- [Selecting Restriction Enzymes](#)
- [Using Custom File with Enzymes](#)
- [Filtering by Number of Hits](#)
- [Excluding Region](#)
- [Circular Molecule](#)
- [Results](#)