

Kütle spektrometrisi

European MassBank (NORMAN MassBank)

Quick Search



The screenshot shows a search form with fields for 'Compound Name', 'Molecular Weight', and 'Formula'. Below the form, there is a list of search results with columns for 'Molecular Weight', 'Formula', and 'Number of Records'.

Peak Search



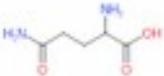
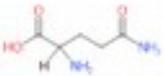
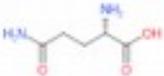
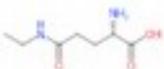
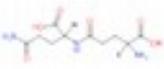
The screenshot shows a search form with fields for 'Retention Time', 'Mass', and 'Abundance'. Below the form, there is a list of search results with columns for 'Retention Time', 'Mass', and 'Abundance'.

Record Index



The screenshot shows a table of records with columns for 'Retention Time', 'Mass', 'Abundance', and 'Number of Records'. Below the table, there is a pie chart showing the distribution of records across different categories.

- [WEB-API WSDL](#)

<input type="checkbox"/>	Name		Formula / Structure	ExactMass	ID
<input type="checkbox"/>	<input checked="" type="checkbox"/> D-Glutamine	5 spectra	C5H10N2O3 	146.06914	
<input type="checkbox"/>	<input checked="" type="checkbox"/> Glutamine	5 spectra	C5H10N2O3 	146.06914	
<input type="checkbox"/>	<input checked="" type="checkbox"/> L-Glutamine	19 spectra	C5H10N2O3 	146.06914	
<input type="checkbox"/>	<input checked="" type="checkbox"/> N-Ethylglutamine	4 spectra	C7H14N2O3 	174.10043	
<input type="checkbox"/>	<input checked="" type="checkbox"/> gamma-Glutamylglutamine	1 spectrum	C10H17N3O6 	275.11172	

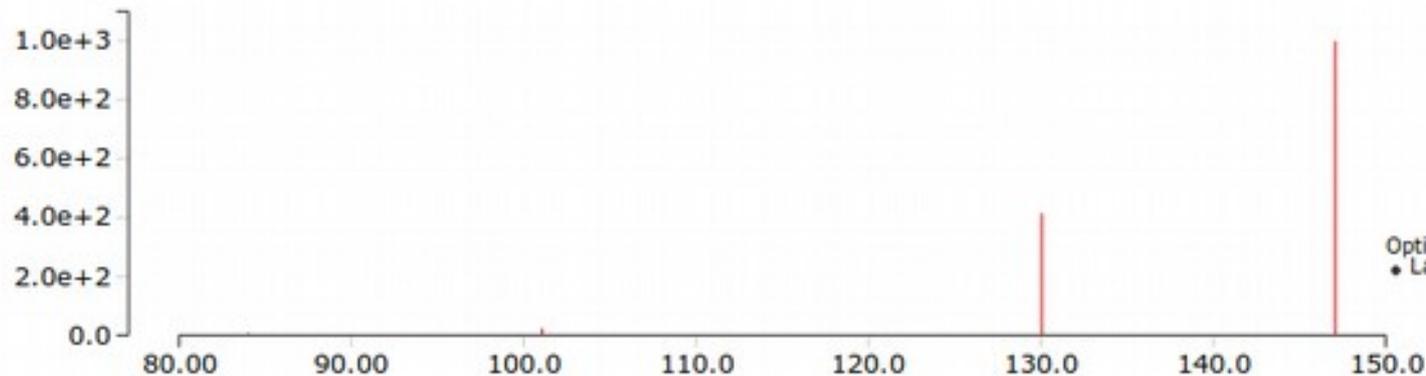
MassBank Record: PB000465

[Home](#) | [Quick Search](#) | [Peak Search](#) | [Record Index](#) | [Statistics](#) | [Imprint/Data privacy](#)

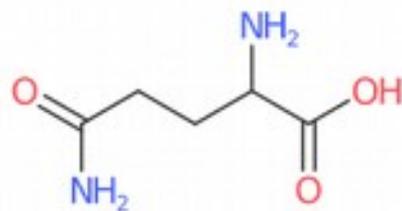
MassBank ID:

Glutamine; LC-ESI-QTOF; MS2; CE:10 eV; [M+H]⁺

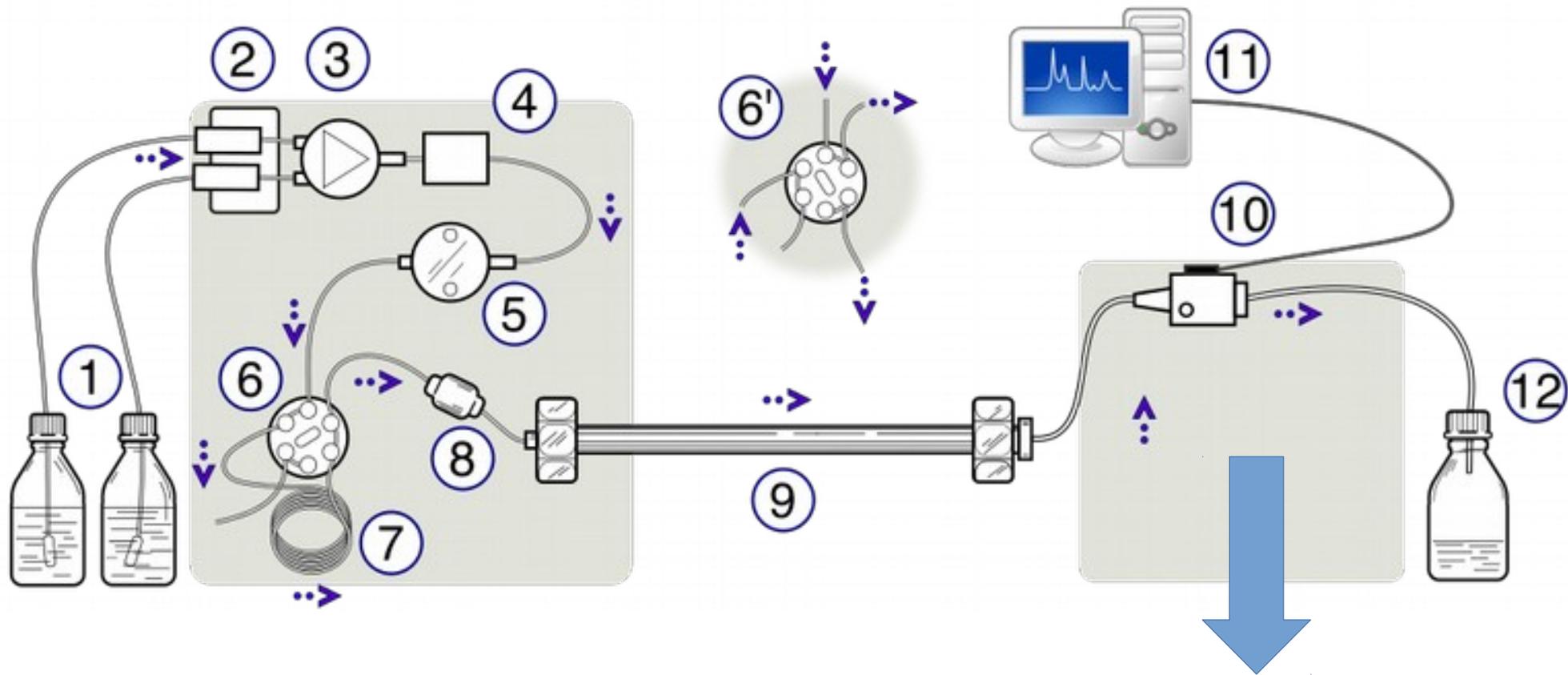
Mass Spectrum



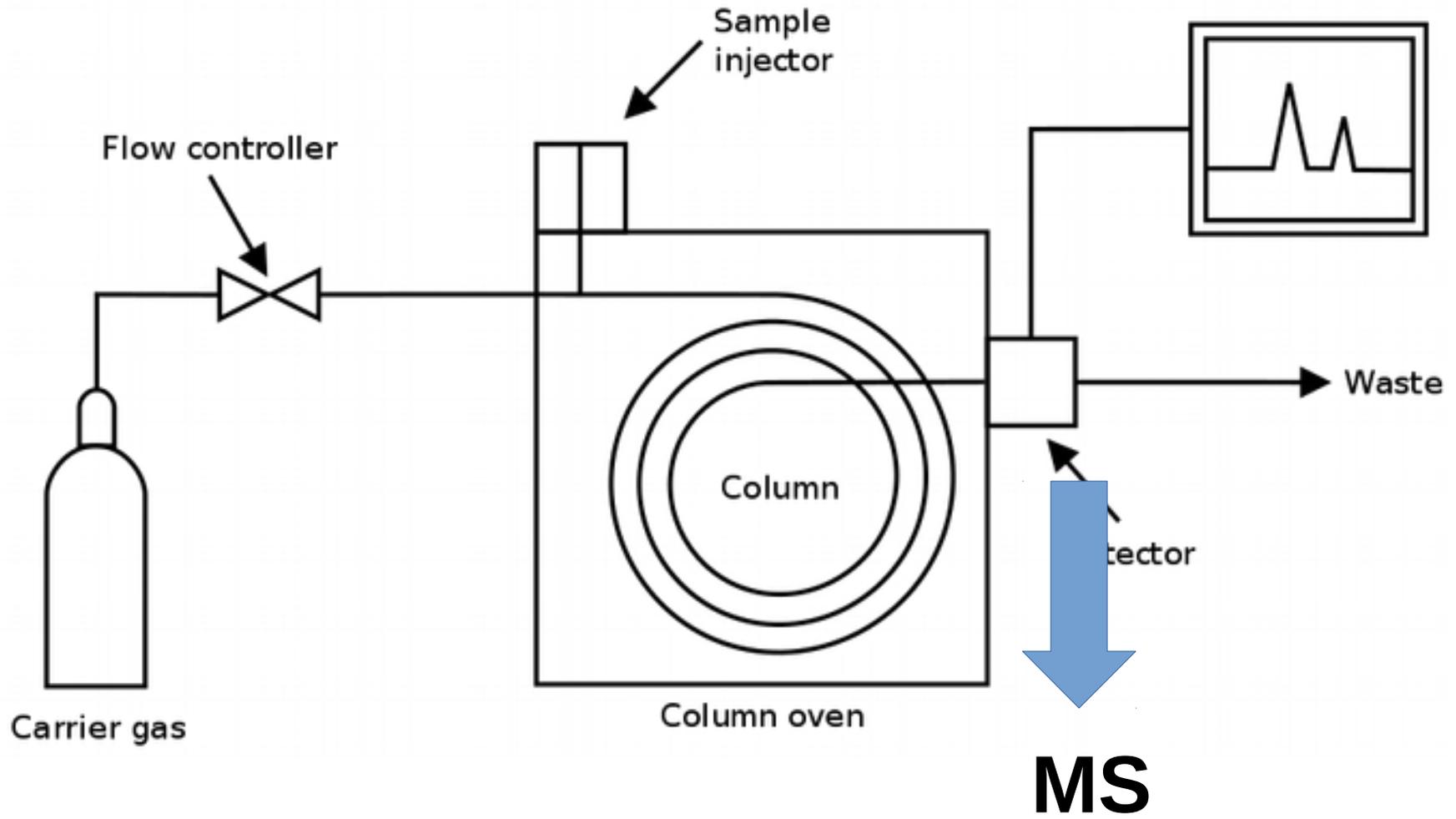
Chemical Structure



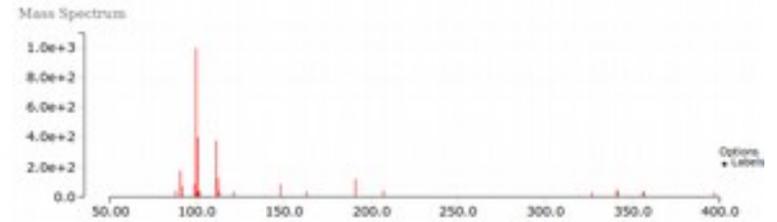
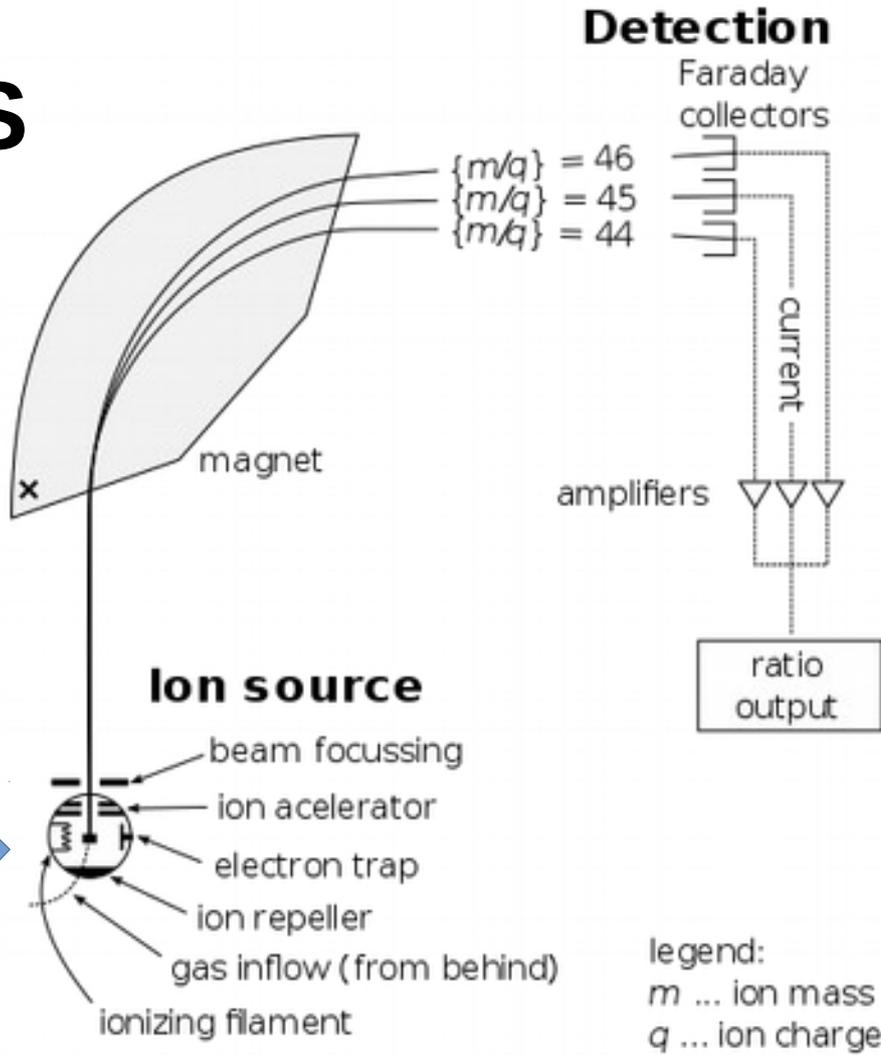
Options
• Labels



MS



MS



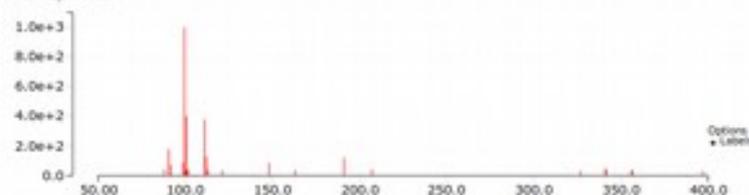
PK\$SPLASH: [splash10-01ot-9801000000-c10341d61ee2d6369219](#)

PK\$NUM_PEAK: 26

PK\$PEAK: m/z int. rel.int.

87.9997	1.51	44
90.5064	6.202	179
90.5253	1.296	37
91.5027	2.545	74
98.5079	3.088	89
99.5113	34.59	999
100.0137	1.313	38
100.5083	13.91	402
101.0111	1.123	32
101.5049	1.567	45
111.0200	13.18	381
112.0184	4.504	130
113.0165	1.442	42
121.0656	1.199	35
148.0521	3.063	88
163.0787	1.254	36
191.0712	4.157	120
207.0435	1.081	31
207.0688	1.439	42
326.9312	1.16	34
341.0021	1.72	50
341.8020	1.309	38
356.0340	1.147	33
356.7647	1.391	40
356.8112	1.213	35
397.1271	1.048	30

Mass Spectrum



//

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<indexedmzML xmlns="http://psi.hupo.org/ms/mzml" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://psi.hupo.org/ms/mzml http://psidev.info/files/ms/mzML/xsd/mzML1.1.1_idx.xsd">
  <mzML xmlns="http://psi.hupo.org/ms/mzml" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://psi.hupo.org/ms/mzml http://psidev.info/files/ms/mzML/xsd/mzML1.1.0.xsd" id="NAI01"
version="1.1.0">
  <cvList count="2">
    <cv id="MS" fullName="Proteomics Standards Initiative Mass Spectrometry Ontology" version="3.30.0" URI="http://
psidev.cvs.sourceforge.net/*checkout*/psidev/psi/psi-ms/mzML/controlledVocabulary/psi-ms.obo"/>
    <cv id="UO" fullName="Unit Ontology" version="12:10:2011" URI="http://obo.cvs.sourceforge.net/*checkout*/obo/obo/
ontology/phenotype/unit.obo"/>
  </cvList>
  <fileDescription>
    <fileContent>
    </fileContent>
  </fileDescription>
  <sourceFileList count="6">
    <sourceFile id="_FUNC001.DAT" name="_FUNC001.DAT" location="file://C:/Users/toprak/Desktop/NAI01.raw">
      <cvParam cvRef="MS" accession="MS:1000769" name="Waters nativeID format" value=""/>
      <cvParam cvRef="MS" accession="MS:1000526" name="Waters raw file" value=""/>
      <cvParam cvRef="MS" accession="MS:1000569" name="SHA-1" value="5d84632dbd4633bdfdd836beea2b13ef0ea36aee"/>
    </sourceFile>
    <sourceFile id="_extern.inf" name="_extern.inf" location="file://C:/Users/toprak/Desktop/NAI01.raw">
      <cvParam cvRef="MS" accession="MS:1000824" name="no nativeID format" value=""/>
      <cvParam cvRef="MS" accession="MS:1000569" name="SHA-1" value="863d7fdb434b43f1ea8b665bc194f04aa4ed6094"/>
    </sourceFile>
    <sourceFile id="_FUNC001.IDX" name="_FUNC001.IDX" location="file://C:/Users/toprak/Desktop/NAI01.raw">
      <cvParam cvRef="MS" accession="MS:1000824" name="no nativeID format" value=""/>
    </sourceFile>
  </sourceFileList>
</mzML>
</indexedmzML>
```

mzML

- cvList
- fileDescription
- referenceableParamGroupList
- sampleList
- instrumentConfigurationList
- softwareList
- dataProcessingList
- acquisitionSettingsList

run

spectrumList

- spectrum
- spectrum
- ...

chromatogramList

- chromatogram
- chromatogram
- ...

spectrum

- scanList
- precursorList
- productList

binaryDataArrayList

- binaryDataArray
- binaryDataArray
- ...

chromatogram

binaryDataArrayList

- binaryDataArray
- binaryDataArray
- ...

```
package mzreader;

import java.io.File;
import uk.ac.ebi.jmzml.model.mzml.CV;
import uk.ac.ebi.jmzml.model.mzml.CVList;
import uk.ac.ebi.jmzml.model.mzml.Chromatogram;
import uk.ac.ebi.jmzml.model.mzml.MzML;
import uk.ac.ebi.jmzml.model.mzml.Run;
import uk.ac.ebi.jmzml.model.mzml.Spectrum;
import uk.ac.ebi.jmzml.xml.io.MzMLUnmarshaller;
```

```
public class MzReader {

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        // TODO code application logic here

        File mzXML = new File("PEG200.mzML");

        MzMLUnmarshaller u = new MzMLUnmarshaller(mzXML);

        MzML completeMz = u.unmarshall();
        CVList cvList = completeMz.getCvList();
        for(CV c : cvList.getCv()) {
            System.out.println(c.getFullName() + "-" + c.getVersion());
            System.out.println(c.toString());
        }
        Run run = completeMz.getRun();
        for(Chromatogram c : run.getChromatogramList().getChromatogram()) {
            System.out.println(c.getId());
        }
        for(Spectrum s : run.getSpectrumList().getSpectrum()) {
            System.out.println(s.getId());
        }
    }
}
```