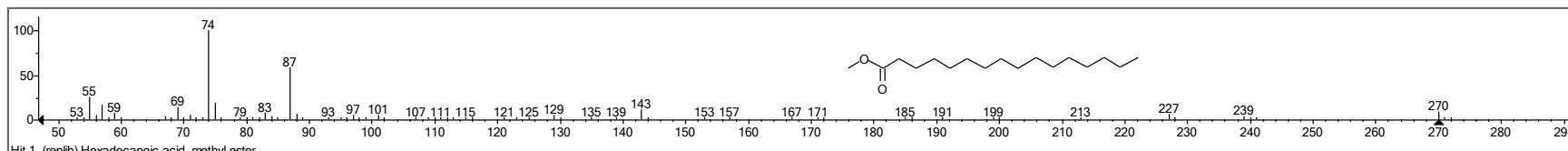


## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

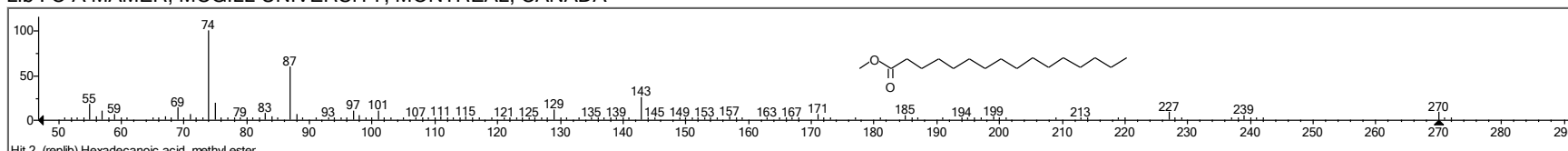
Spectrum pada RT = 18.685menit



Hit 1. (replib) Hexadecanoic acid, methyl ester

Hexadecanoic acid, methyl ester

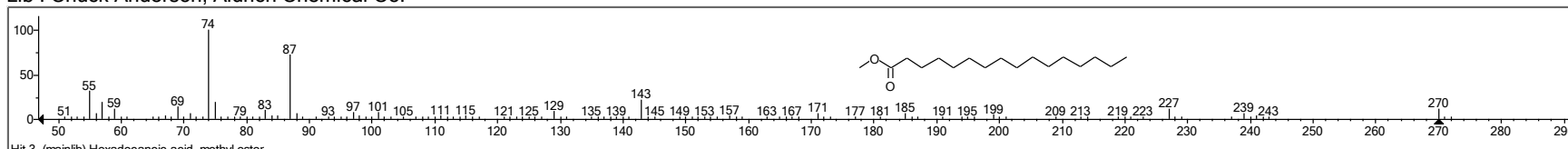
Lib : O A MAMER, MCGILL UNIVERSITY, MONTREAL, CANADA



Hit 2. (replib) Hexadecanoic acid, methyl ester

Hexadecanoic acid, methyl ester

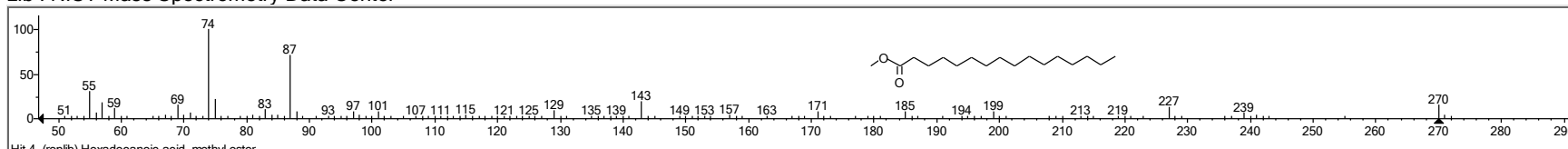
Lib : Chuck Anderson, Aldrich Chemical Co.



Hit 3. (mainlib) Hexadecanoic acid, methyl ester

Hexadecanoic acid, methyl ester

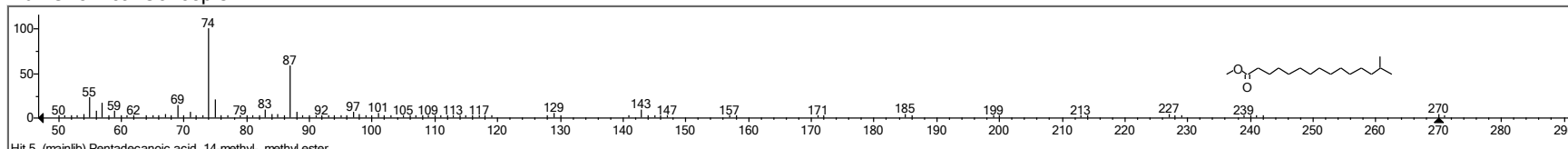
Lib : NIST Mass Spectrometry Data Center



Hit 4. (replib) Hexadecanoic acid, methyl ester

Hexadecanoic acid, methyl ester

Lib : Chemical Concepts



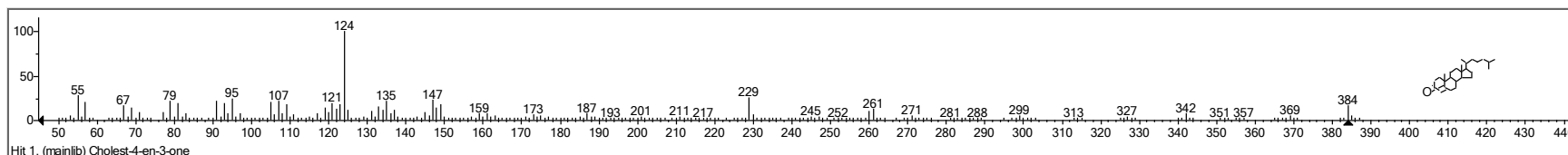
Hit 5. (mainlib) Pentadecanoic acid, 14-methyl-, methyl ester

Pentadecanoic acid, 14-methyl-, methyl ester

Lib : Chemical Concepts

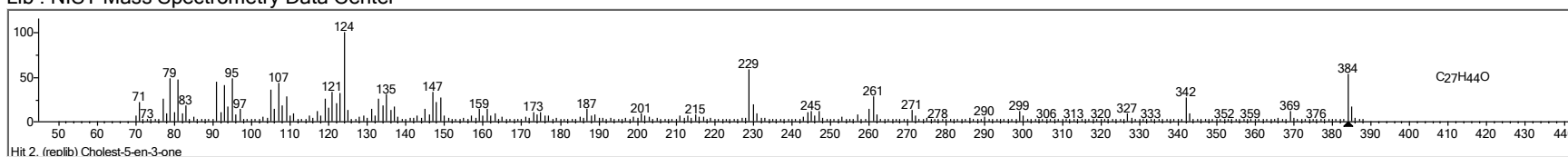
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 19.395menit



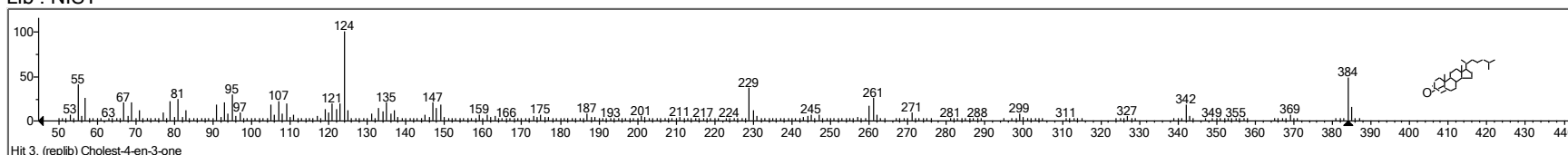
Cholestenone

Lib : NIST Mass Spectrometry Data Center



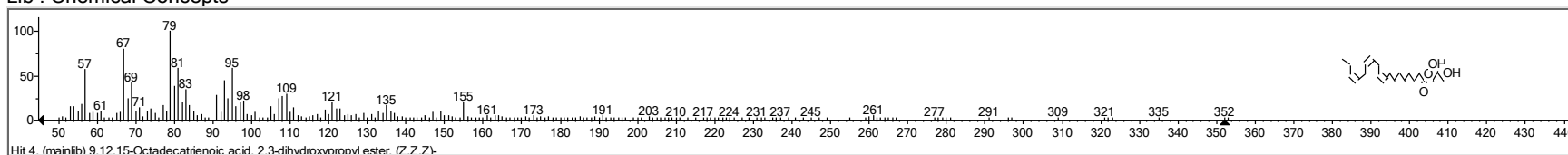
Cholesterone

Lib : NIST



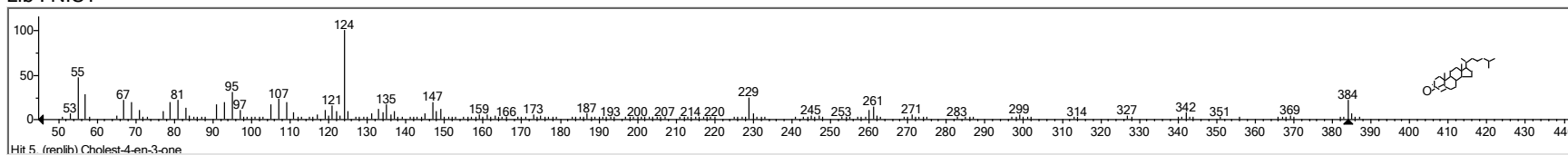
Cholestenone

Lib : Chemical Concepts



Linolenin, 1-mono-

Lib : NIST

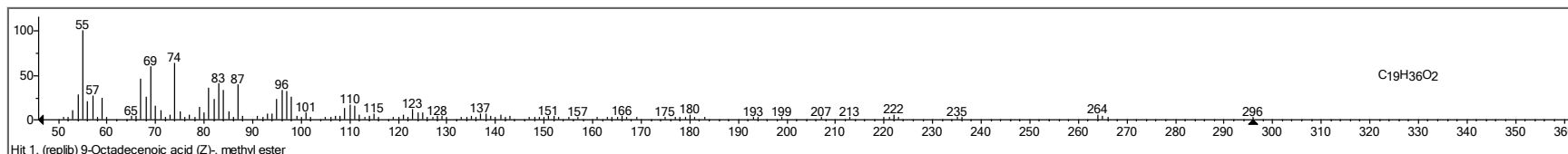


Cholestenone

Lib : Div. of Experiment Therapeutics WRAIR, WRAMC, Washington DC 20307

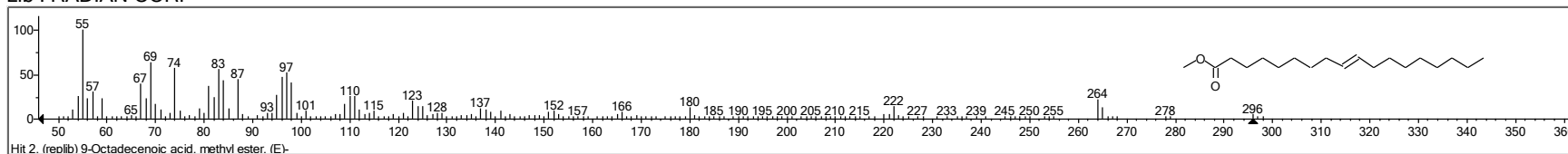
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 20.331menit



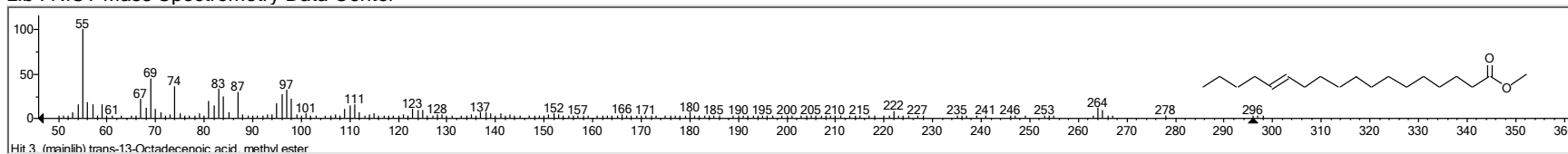
Oleic acid, methyl ester

Lib : RADIAN CORP



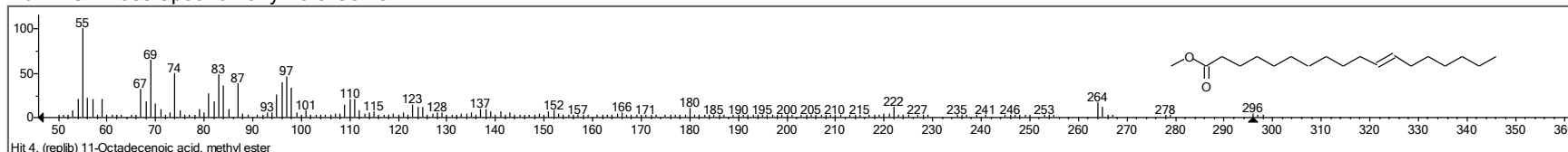
Elaidic acid, methyl ester

Lib : NIST Mass Spectrometry Data Center



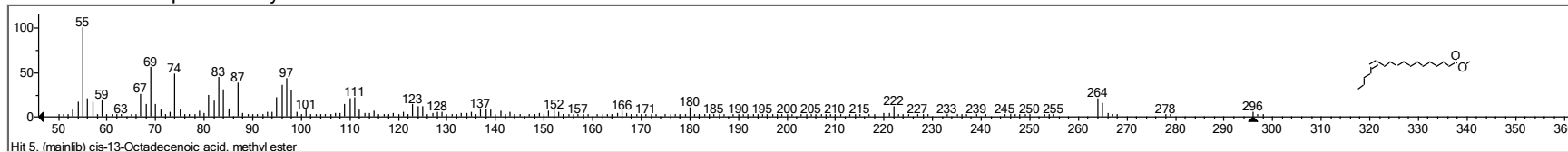
trans-13-Octadecenoic acid, methyl ester

Lib : NIST Mass Spectrometry Data Center



11-Octadecenoic acid, methyl ester

Lib : NIST Mass Spectrometry Data Center

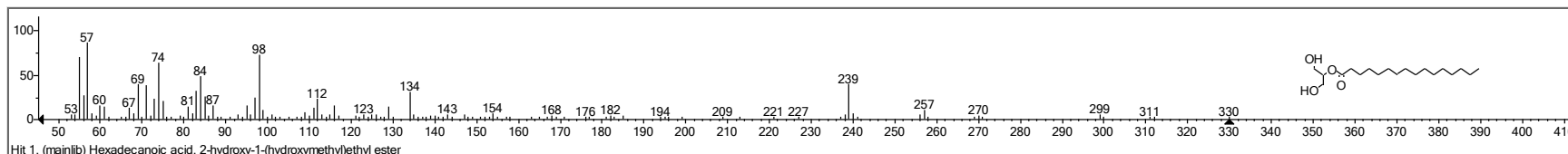


cis-13-Octadecenoic acid, methyl ester

Lib : NIST Mass Spectrometry Data Center

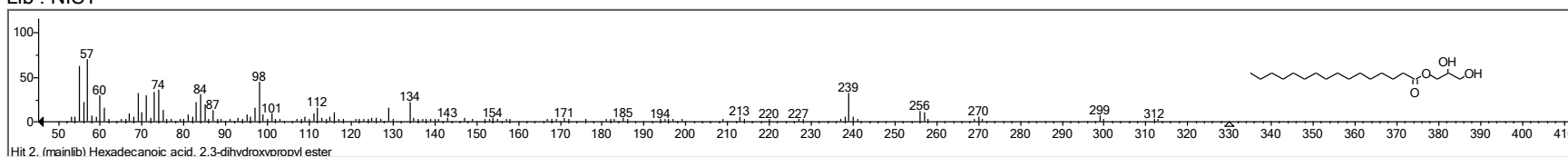
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 21.626menit



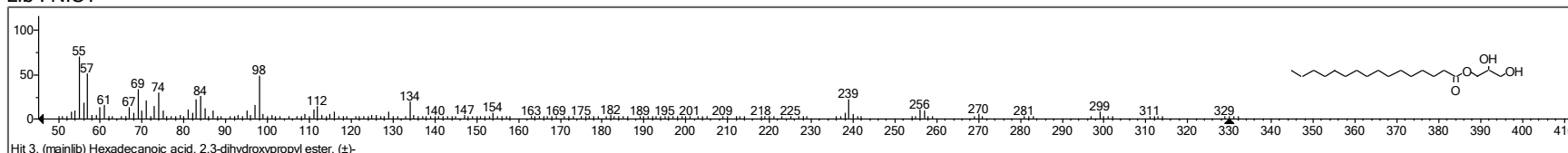
Palmitin, 2-mono-

Lib : NIST



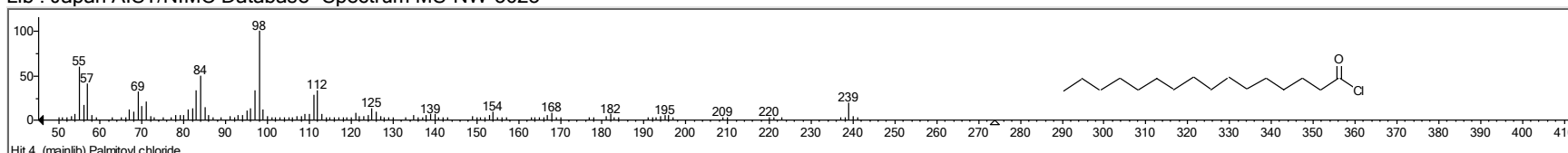
Palmitin, 1-mono-

Lib : NIST



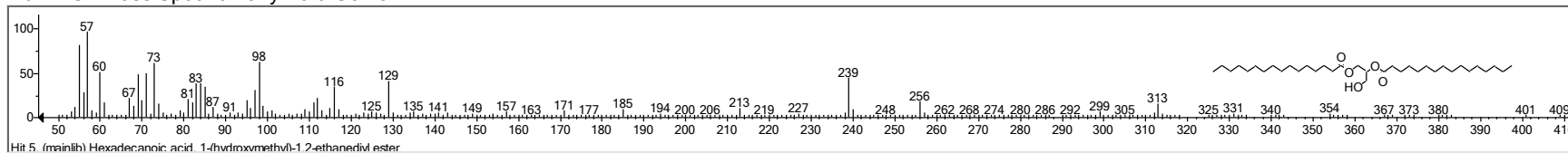
2,3-Dihydroxypropyl palmitate

Lib : Japan AIST/NIMC Database- Spectrum MS-NW-5623



Palmitoyl chloride

Lib : NIST Mass Spectrometry Data Center

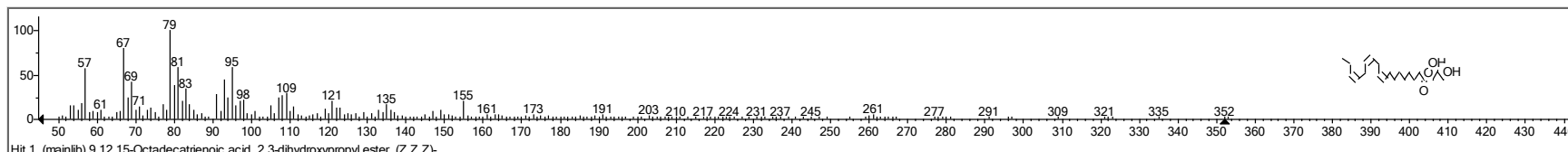


Dipalmitin

Lib : R.T.HOLMAN,UNIVERSITY OF MINNESOTA

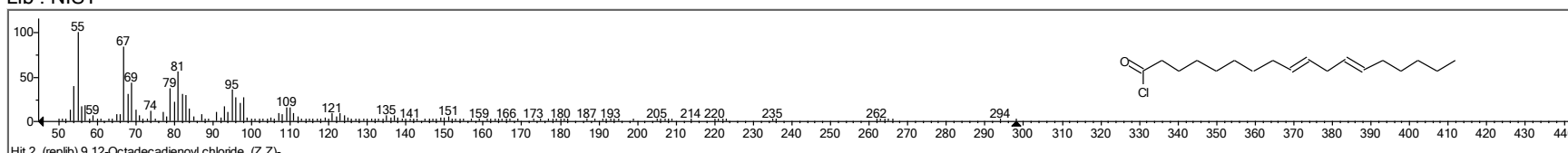
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 23.032 menit



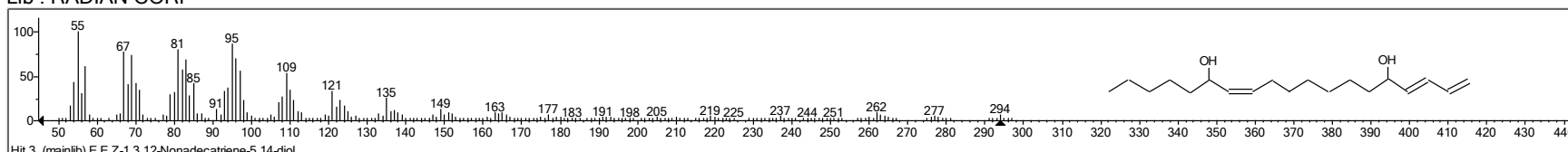
Linolenin, 1-mono-

Lib : NIST



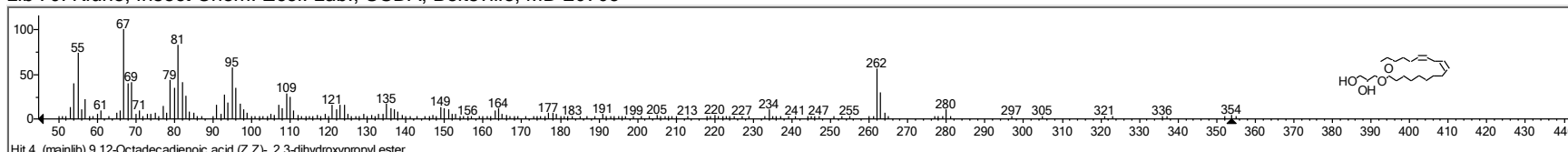
Linoleoyl chloride

Lib : RADIAN CORP



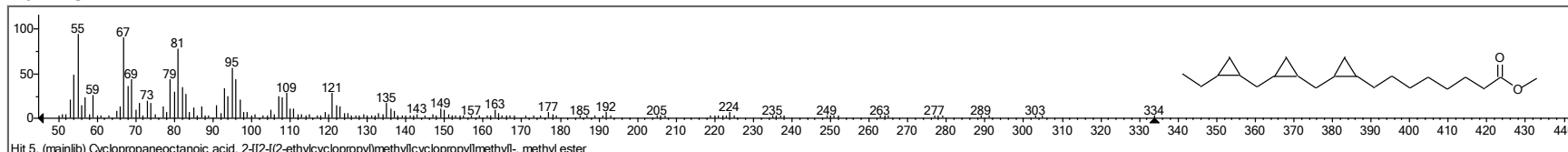
E,E,Z-1,3,12-Nonadecatriene-5,14-diol

Lib : J. Klune, Insect Chem. Ecol. Lab., USDA, Beltsville, MD 20705



Linolein, 1-mono-

Lib : NIST

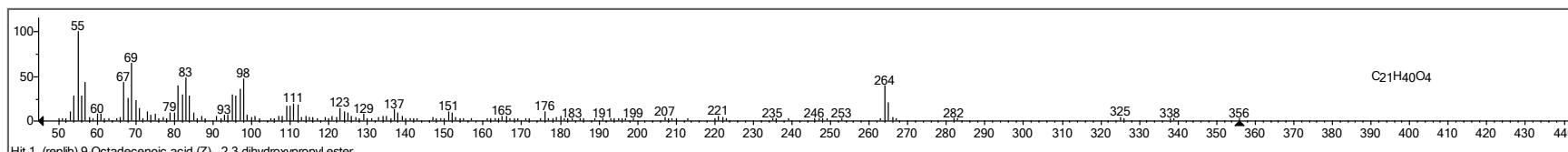


Cyclopropanoic acid, 2-[[2-[(2-ethylcyclopropyl)methyl]cyclopropyl]methyl]-, methyl ester

Lib : R.T.HOLMAN, UNIVERSITY OF MINNESOTA

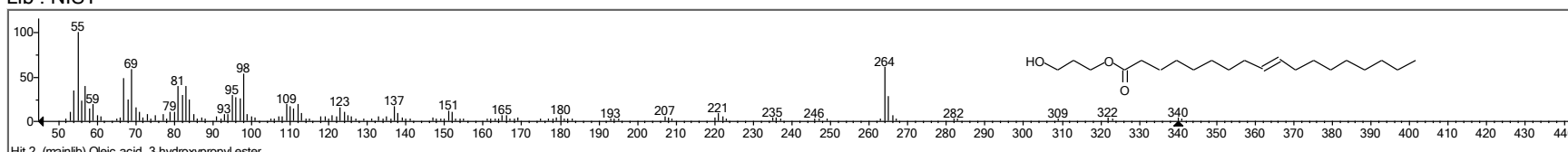
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 23.077 menit



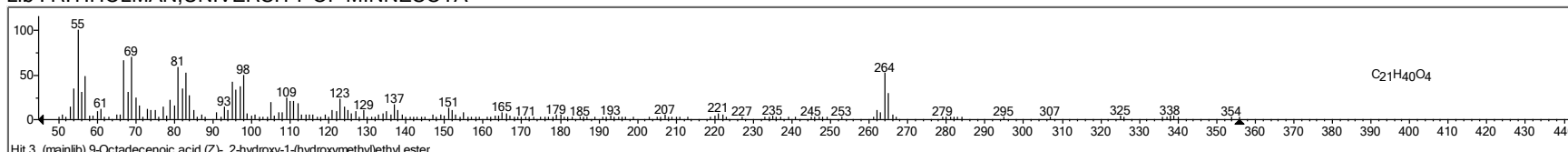
Olein, 1-mono-

Lib : NIST



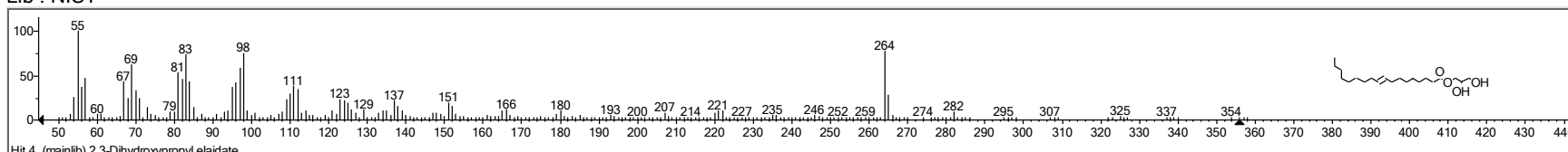
Oleic acid, 3-hydroxypropyl ester

Lib : R.T.HOLMAN,UNIVERSITY OF MINNESOTA



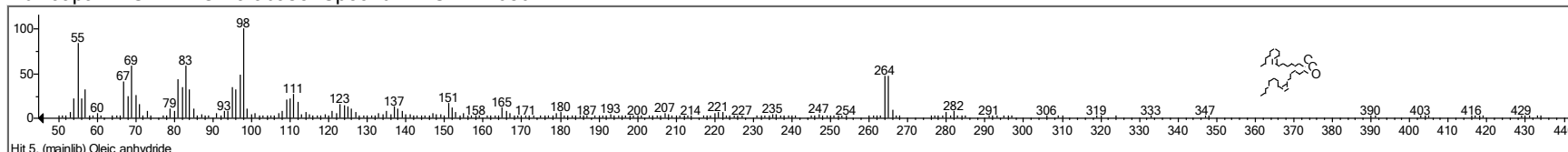
Olein, 2-mono-

Lib : NIST



2,3-Dihydroxypropyl elaidate

Lib : Japan AIST/NIMC Database- Spectrum MS-IW-4086

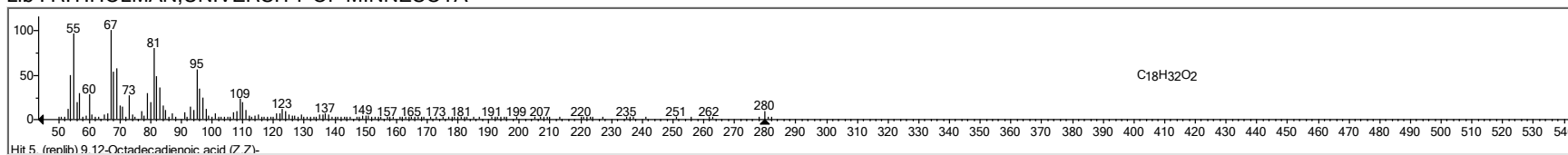
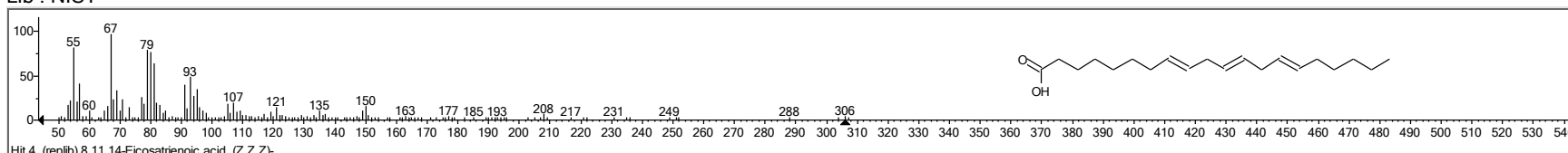
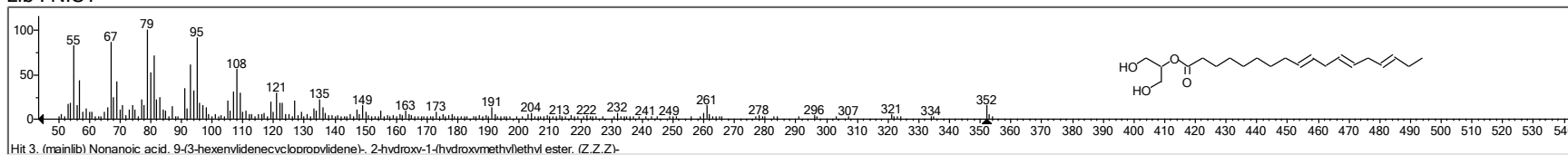
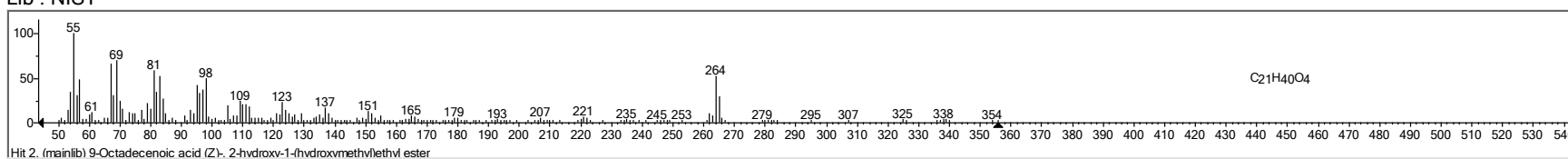
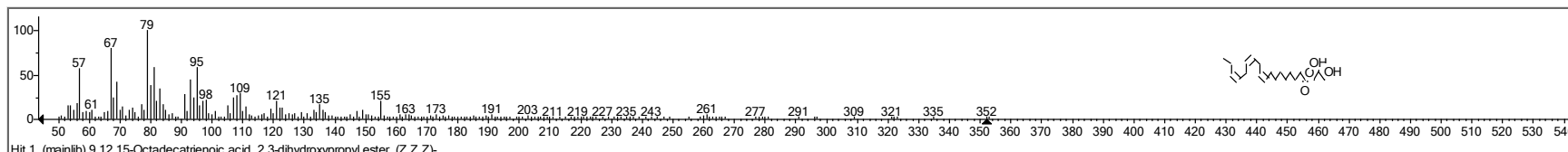


Oleic anhydride

Lib : Japan AIST/NIMC Database- Spectrum MS-IW-4184

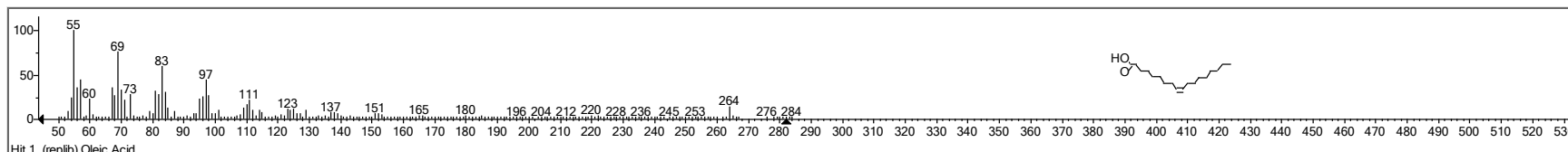
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 23.202 menit



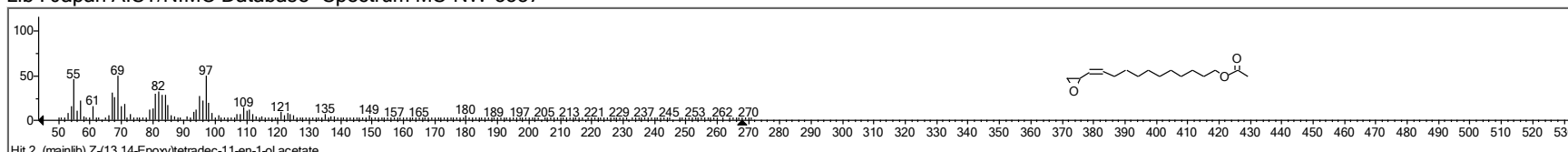
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 23.267 menit



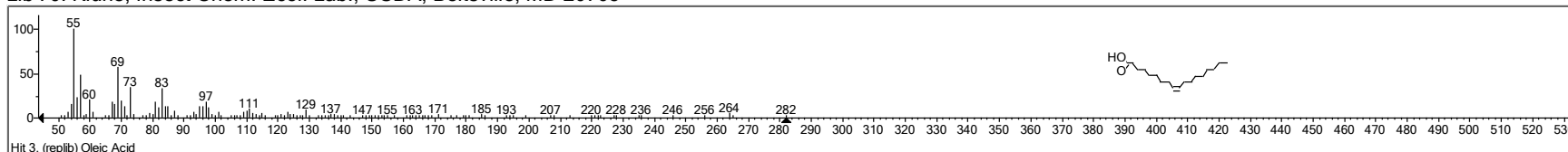
Oleic Acid

Lib : Japan AIST/NIMC Database- Spectrum MS-NW-5537



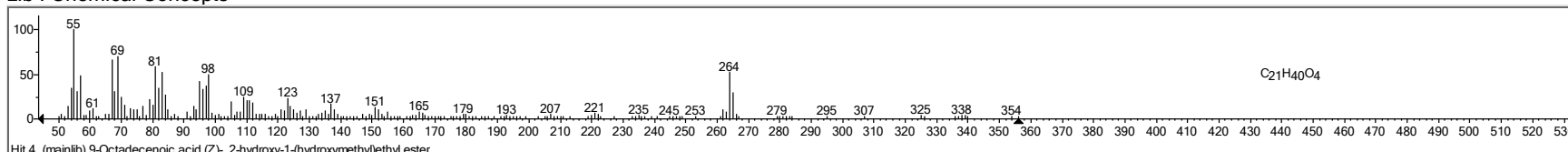
Z-(13,14-Epoxy)tetradec-11-en-1-ol acetate

Lib : J. Klune, Insect Chem. Ecol. Lab., USDA, Beltsville, MD 20705



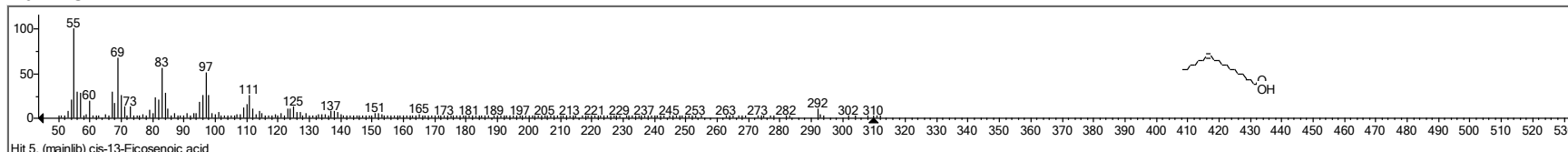
Oleic Acid

Lib : Chemical Concepts



Olein, 2-mono-

Lib : NIST



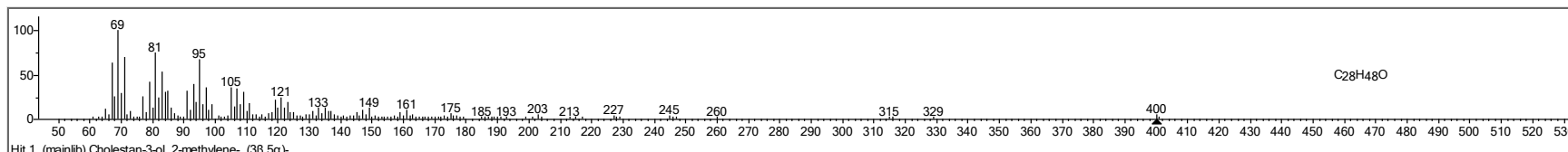
cis-13-Eicosenoic acid

Lib : NIST Mass Spectrometry Data Center



## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

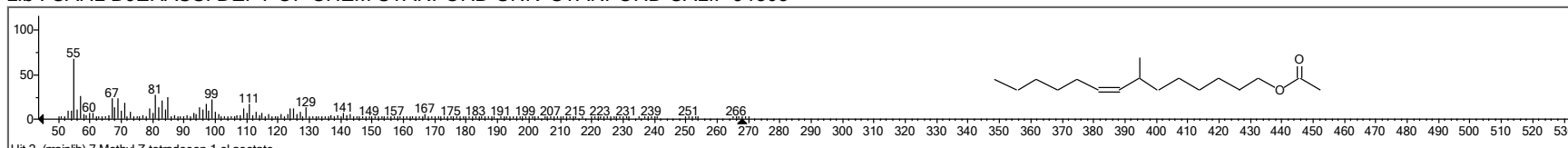
Spectrum pada RT = 23.492 menit



Hit 1. (mainlib) Cholestan-3-ol, 2-methylene-, (3β,5α)-

5α-Cholestan-3β-ol, 2-methylene-

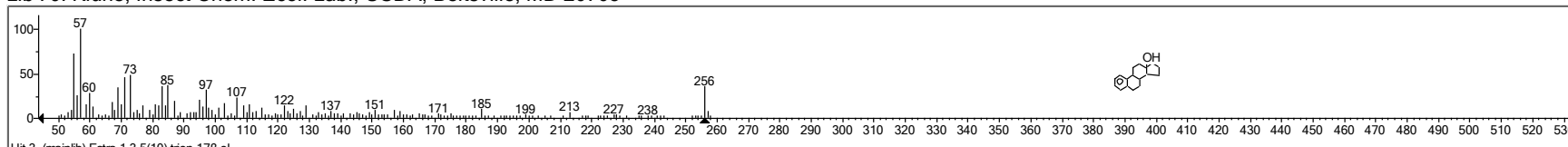
Lib : CARL DJERASSI DEPT OF CHEM STANFORD UNIV STANFORD CALIF 94305



Hit 2. (mainlib) 7-Methyl-Z-tetradecen-1-ol acetate

7-Methyl-Z-tetradecen-1-ol acetate

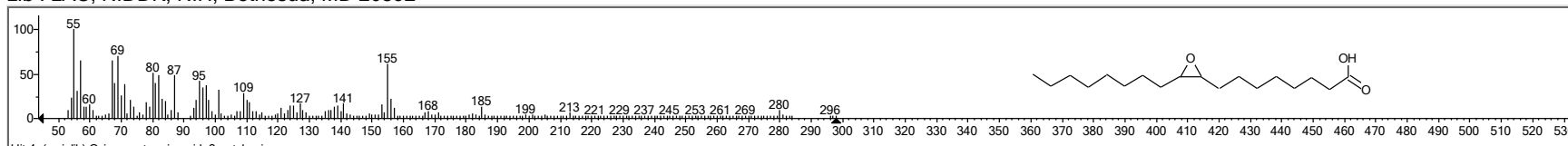
Lib : J. Klune, Insect Chem. Ecol. Lab., USDA, Beltsville, MD 20705



Hit 3. (mainlib) Estradiol, 3-deoxy-

Estradiol, 3-deoxy-

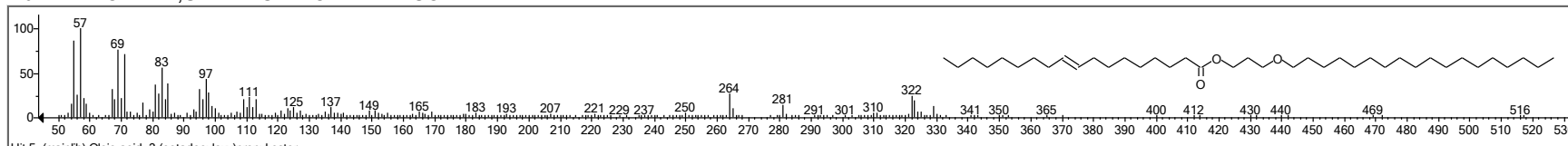
Lib : LAC, NIDDK, NIH, Bethesda, MD 20892



Hit 4. (mainlib) Oxiraneoctanoic acid, 3-octyl-, cis-

Oxiraneoctanoic acid, 3-octyl-, cis-

Lib : R.T.HOLMAN, UNIVERSITY OF MINNESOTA



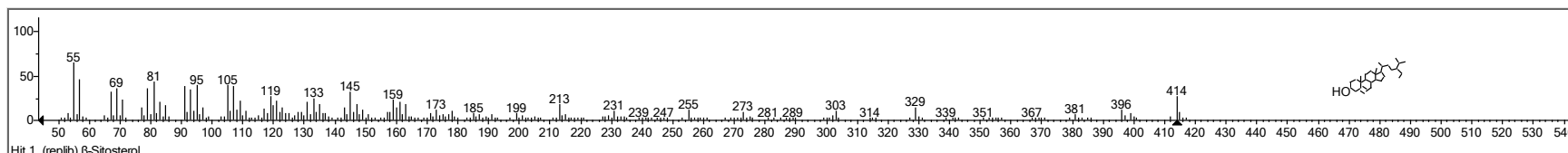
Hit 5. (mainlib) Oleic acid, 3-(octadecyloxy)propyl ester

Oleic acid, 3-(octadecyloxy)propyl ester

Lib : R.T.HOLMAN, UNIVERSITY OF MINNESOTA

## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

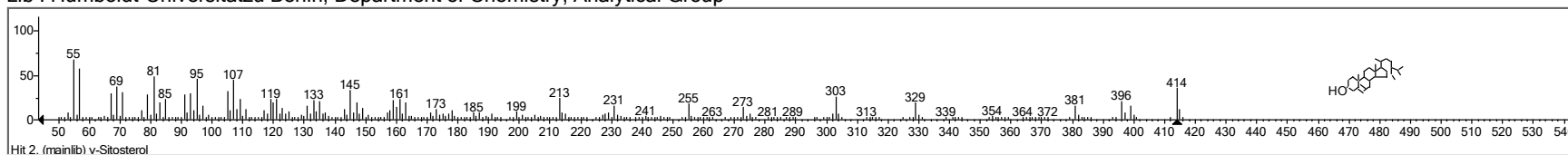
Spectrum pada RT = 23.587 menit



Hit 1. (realib)  $\beta$ -Sitosterol

$\beta$ -Sitosterol

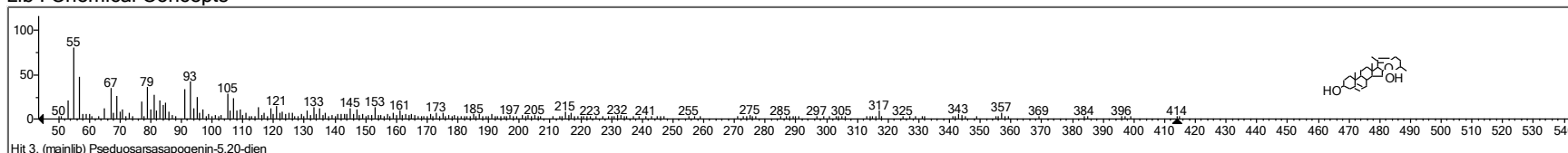
Lib : Humboldt-Universitatzu Berlin, Department of Chemistry, Analytical Group



Hit 2. (mainlib)  $\gamma$ -Sitosterol

$\gamma$ -Sitosterol

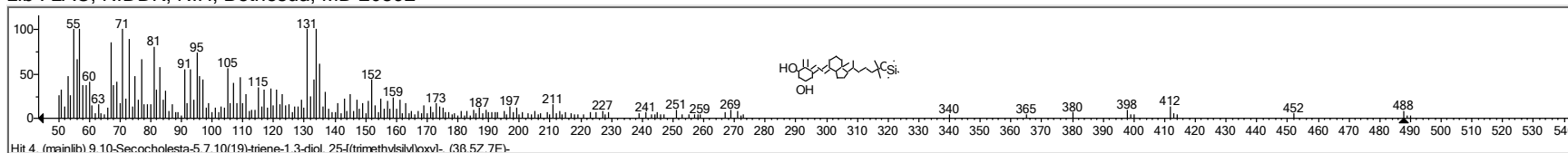
Lib : Chemical Concepts



Hit 3. (mainlib) Pseudoarsasapogenin-5,20-dien

Pseudoarsasapogenin-5,20-dien

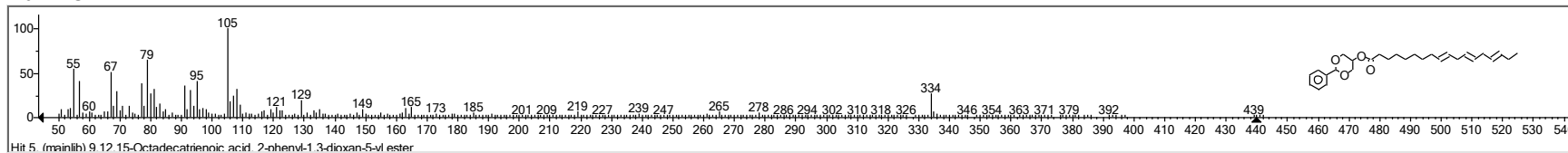
Lib : LAC, NIDDK, NIH, Bethesda, MD 20892



Hit 4. (mainlib) 9,10-Secocholesta-5,7,10(19)-triene-1,3-diol, 25-[(trimethylsilyl)oxy]-, (3 $\beta$ ,5Z,7E)-

9,10-Secocholesta-5,7,10(19)-triene-1,3-diol, 25-[(trimethylsilyl)oxy]-, (3 $\beta$ ,5Z,7E)-

Lib : NIST



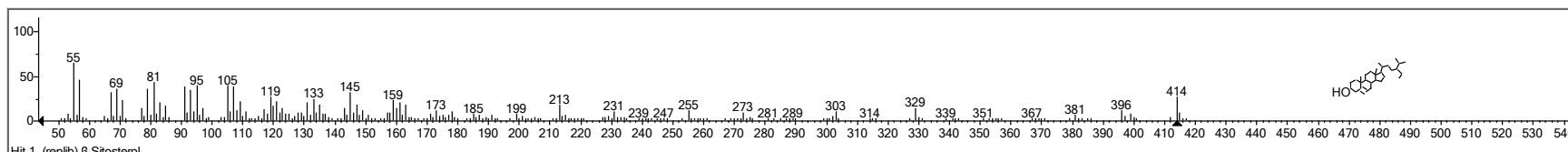
Hit 5. (mainlib) 9,12,15-Octadecatrienoic acid, 2-phenyl-1,3-dioxan-5-yl ester

9,12,15-Octadecatrienoic acid, 2-phenyl-1,3-dioxan-5-yl ester

Lib : R.T.HOLMAN, UNIVERSITY OF MINNESOTA

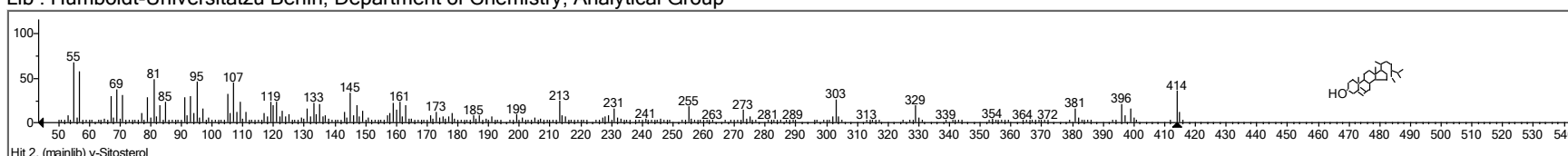
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 23.682 menit



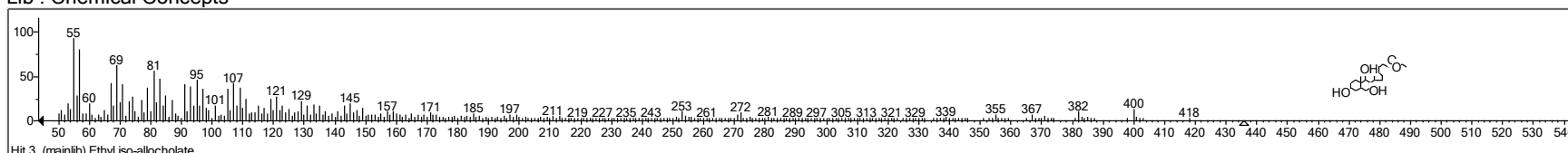
$\beta$ -Sitosterol

Lib : Humboldt-Universitatzu Berlin, Department of Chemistry, Analytical Group



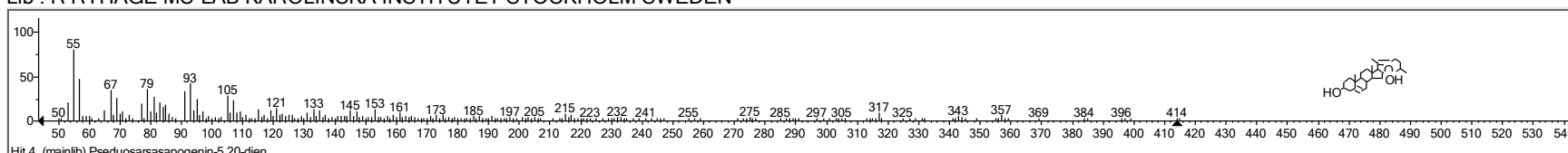
$\gamma$ -Sitosterol

Lib : Chemical Concepts



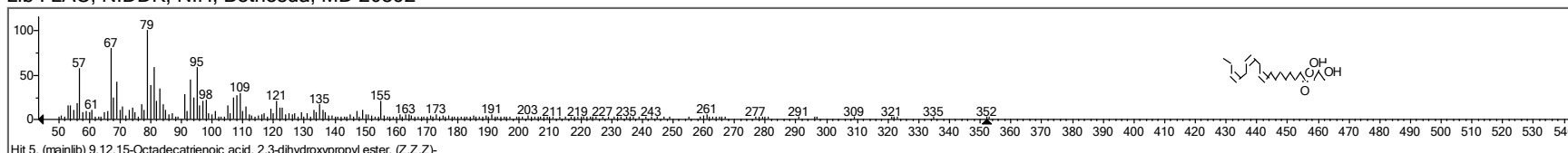
Ethyl iso-allocholate

Lib : R RYHAGE MS-LAB KAROLINSKA INSTITUTET STOCKHOLM SWEDEN



Pseudoarsasapogenin-5,20-dien

Lib : LAC, NIDDK, NIH, Bethesda, MD 20892

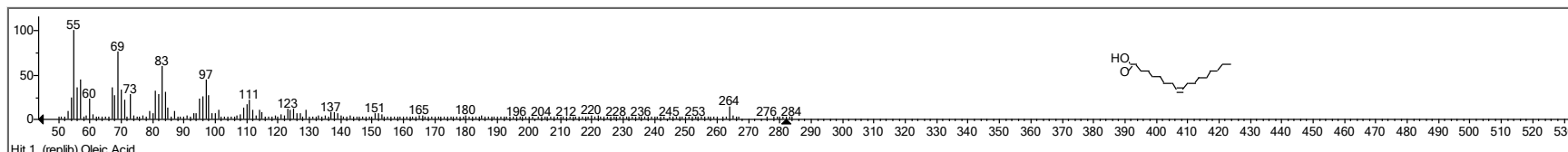


Linolenin, 1-mono-

Lib : NIST

## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

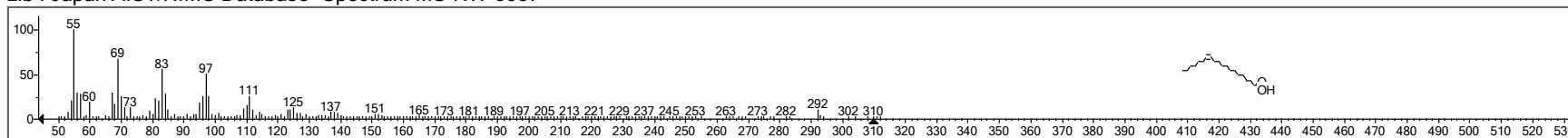
Spectrum pada RT = 24.377 menit



Hit 1. (replib) Oleic Acid

Oleic Acid

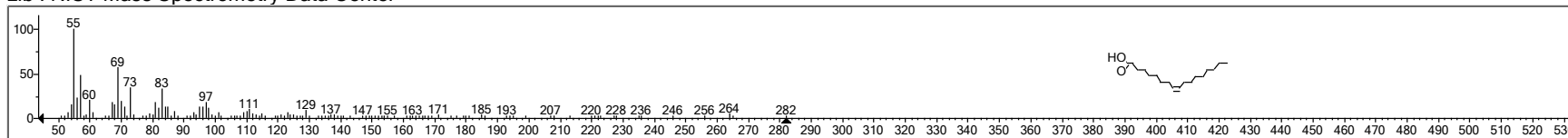
Lib : Japan AIST/NIMC Database- Spectrum MS-NW-5537



Hit 2. (mainlib) cis-13-Eicosenoic acid

cis-13-Eicosenoic acid

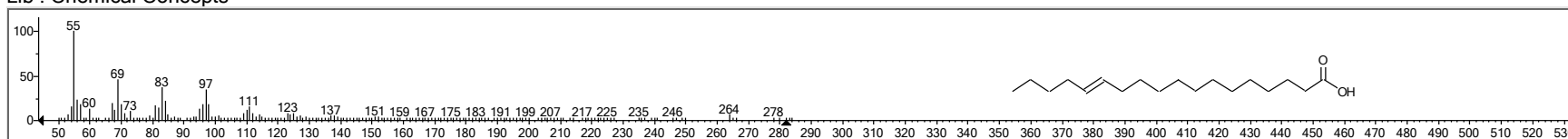
Lib : NIST Mass Spectrometry Data Center



Hit 3. (replib) Oleic Acid

Oleic Acid

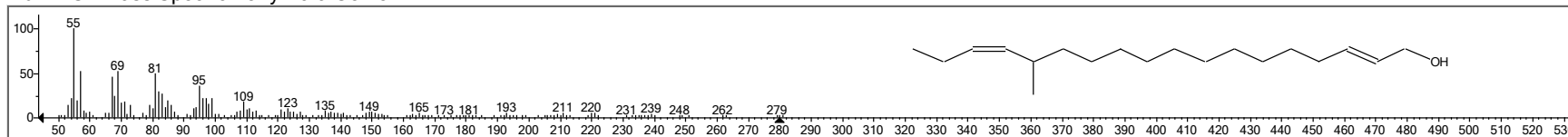
Lib : Chemical Concepts



Hit 4. (mainlib) trans-13-Octadecenoic acid

trans-13-Octadecenoic acid

Lib : NIST Mass Spectrometry Data Center



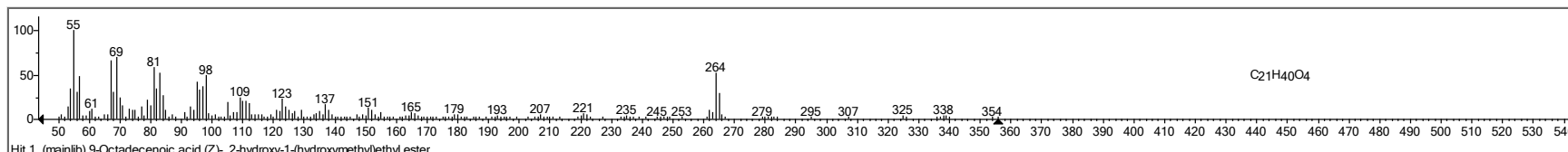
Hit 5. (mainlib) 12-Methyl-E,E-2,13-octadecadien-1-ol

12-Methyl-E,E-2,13-octadecadien-1-ol

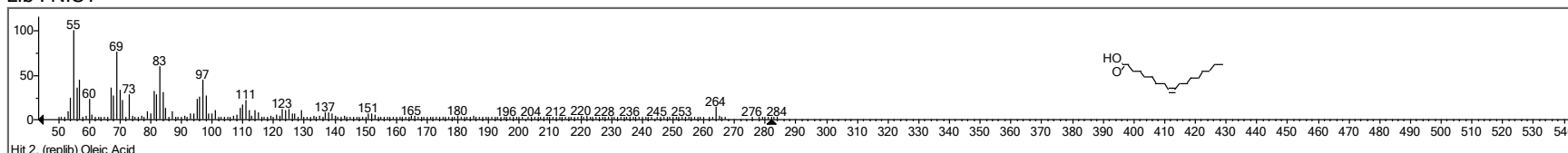
Lib : J. Klune, Insect Chem. Ecol. Lab., USDA, Beltsville, MD 20705

## SPKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 24.767 menit

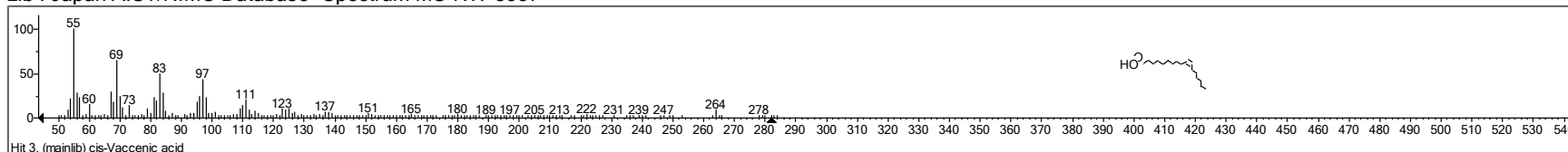


**β-Monoolein**  
Lib : NIST



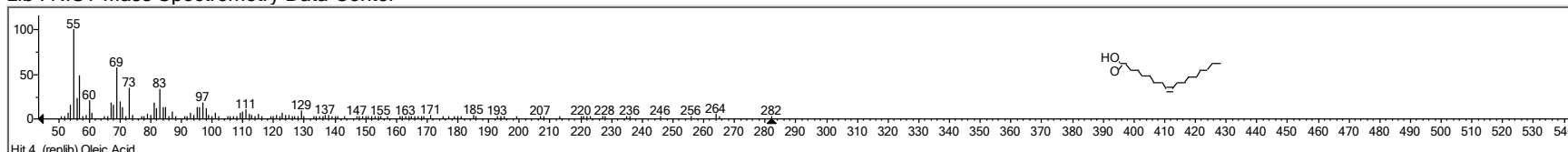
Oleic Acid

Lib : Japan AIST/NIMC Database- Spectrum MS-NW-5537



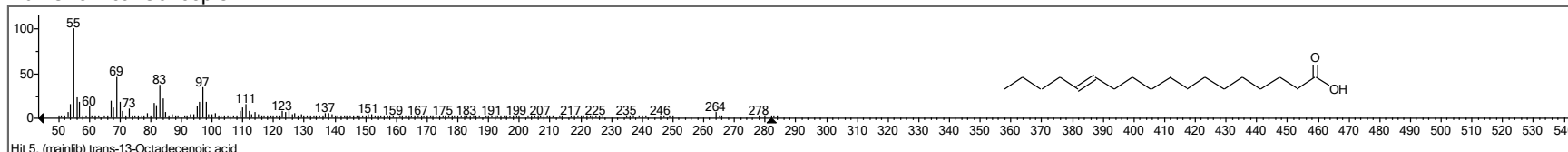
cis-Vaccenic acid

Lib : NIST Mass Spectrometry Data Center



Oleic Acid

Lib : Chemical Concepts

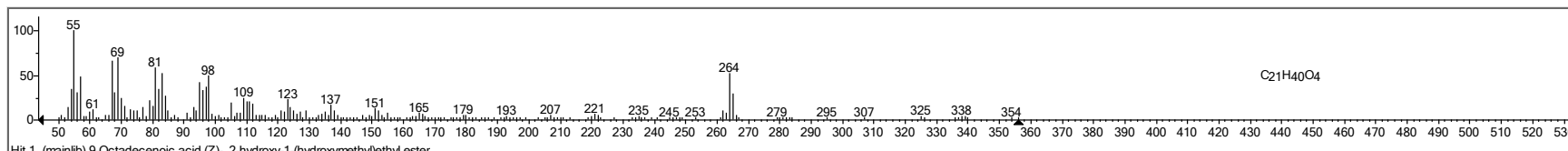


trans-13-Octadecenoic acid

Lib : NIST Mass Spectrometry Data Center

## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

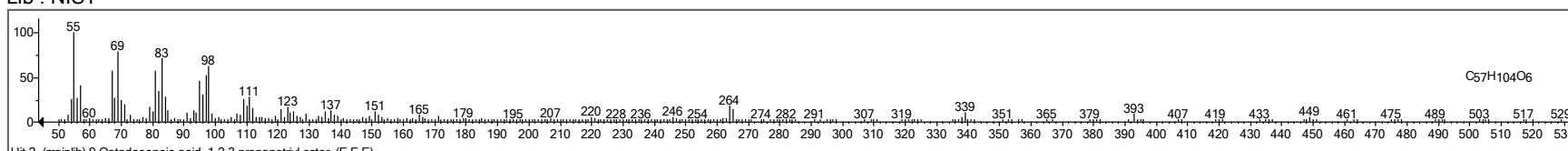
Spectrum pada RT = 24.947 menit



Hit 1. (mainlib) 9-Octadecenoic acid (Z)-, 2-hydroxy-1-(hydroxymethyl)ethyl ester

**$\beta$ -Monoolein**

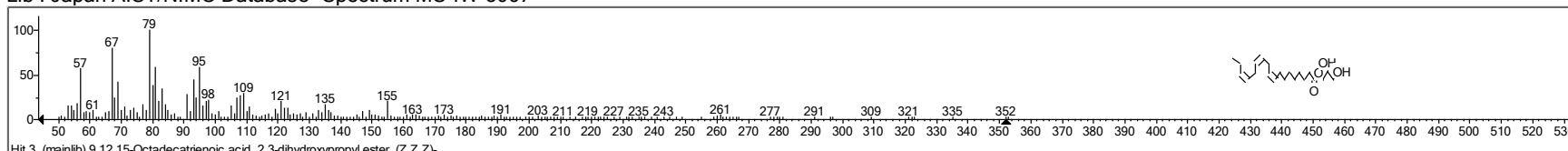
Lib : NIST



Hit 2. (mainlib) 9-Octadecenoic acid, 1,2,3-propanetriyl ester. (E,E,E)-

**9-Octadecenoic acid, 1,2,3-propanetriyl ester, (E,E,E)-**

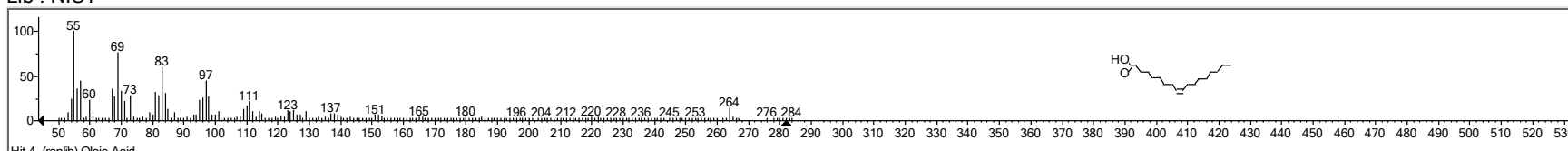
Lib : Japan AIST/NIMC Database- Spectrum MS-IW-5067



Hit 3. (mainlib) 9,12,15-Octadecatrienoic acid, 2,3-dihydroxypropyl ester. (Z,Z,Z)-

**Linolenin, 1-mono-**

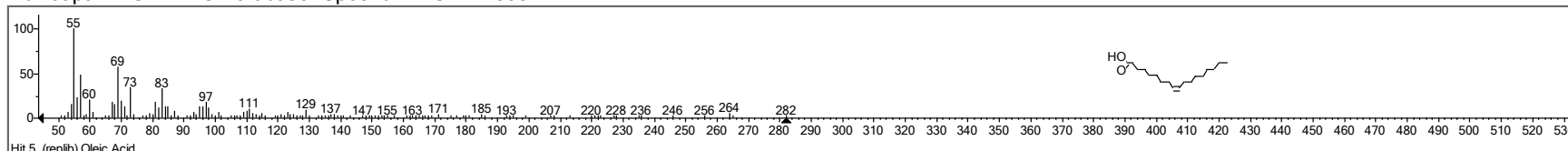
Lib : NIST



Hit 4. (renlib) Oleic Acid

**Oleic Acid**

Lib : Japan AIST/NIMC Database- Spectrum MS-NW-5537



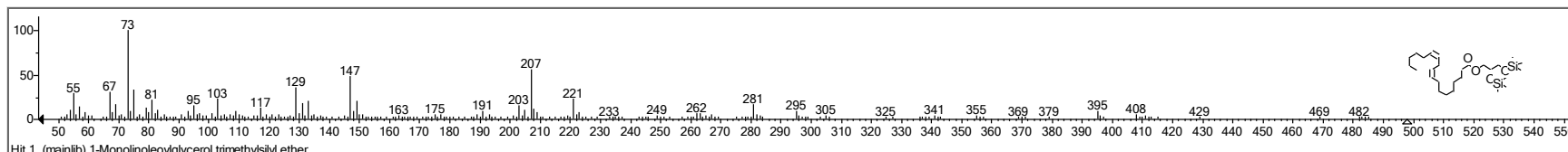
Hit 5. (renlib) Oleic Acid

**Oleic Acid**

Lib : Chemical Concepts

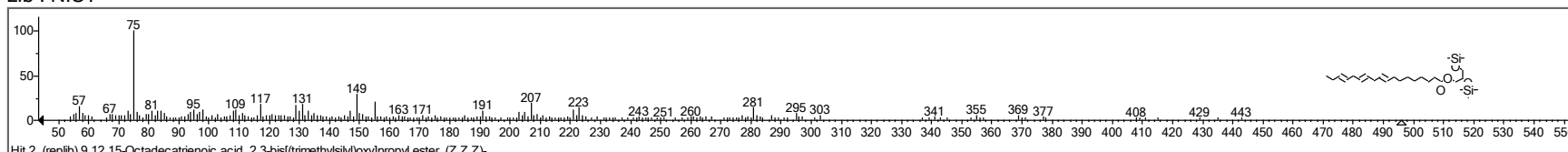
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 25.593 menit



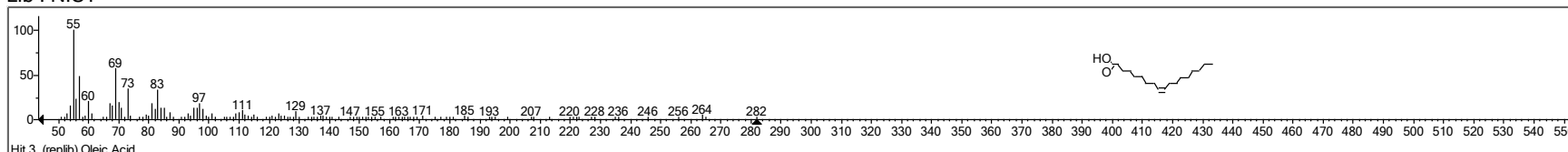
1-Monolinoleoylglycerol trimethylsilyl ether

Lib : NIST



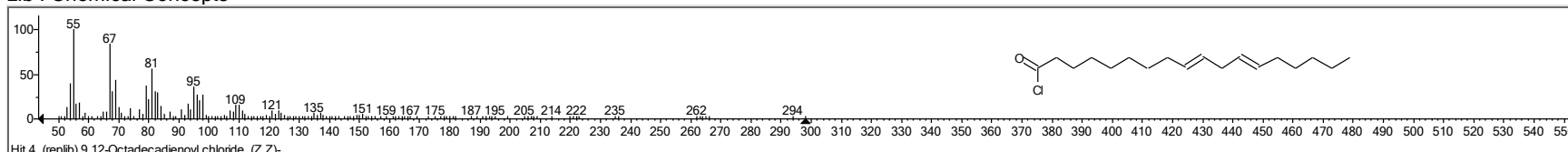
9,12,15-Octadecatrienoic acid, 2,3-bis(trimethylsilyloxy)propyl ester, (Z,Z,Z)-

Lib : NIST



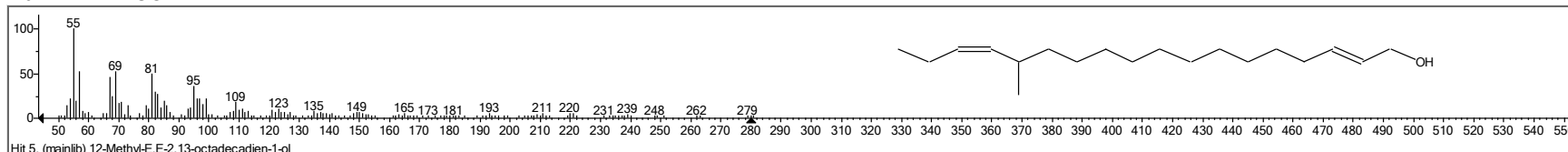
Oleic Acid

Lib : Chemical Concepts



Linoleoyl chloride

Lib : RADIAN CORP

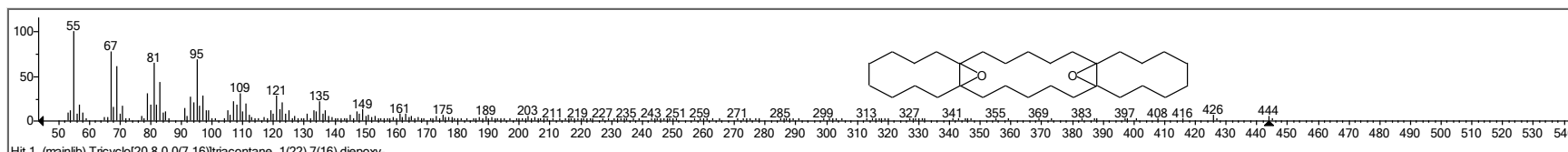


12-Methyl-E,E-2,13-octadecadien-1-ol

Lib : J. Klune, Insect Chem. Ecol. Lab., USDA, Beltsville, MD 20705

## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

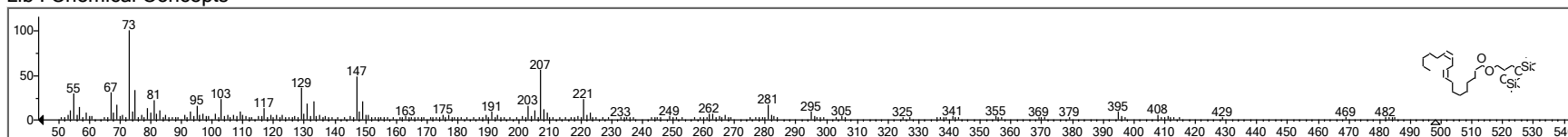
Spectrum pada RT = 26.323 menit



Hit 1. (mainlib) Tricyclo[20.8.0.0(7,16)]triacotane, 1(22),7(16)-diepoxy-

Tricyclo[20.8.0.0(7,16)]triacotane, 1(22),7(16)-diepoxy-

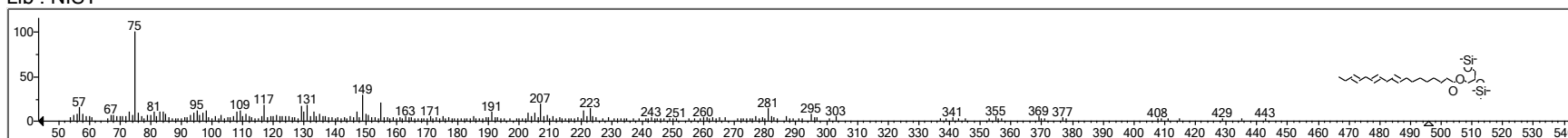
Lib : Chemical Concepts



Hit 2. (mainlib) 1-Monolinoleoylglycerol trimethylsilyl ether

1-Monolinoleoylglycerol trimethylsilyl ether

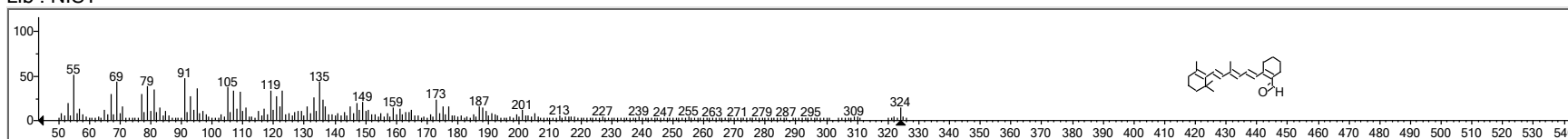
Lib : NIST



Hit 3. (replib) 9,12,15-Octadecatrienoic acid, 2,3-bis(trimethylsilyloxy)propyl ester, (Z,Z,Z)-

9,12,15-Octadecatrienoic acid, 2,3-bis(trimethylsilyloxy)propyl ester, (Z,Z,Z)-

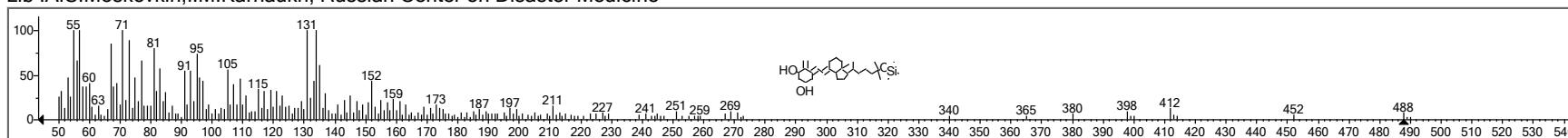
Lib : NIST



Hit 4. (mainlib) 2-[4-methyl-6-(2,6,6-trimethylcyclohex-1-enyl)hexa-1,3,5-trienyl]cyclohex-1-en-1-carboxaldehyde

2-[4-methyl-6-(2,6,6-trimethylcyclohex-1-enyl)hexa-1,3,5-trienyl]cyclohex-1-en-1-carboxaldehyde

Lib : A.S.Moskovkin,I.M.Karnaugh, Russian Center on Disaster Medicine



Hit 5. (mainlib) 9,10-Secocholesta-5,7,10(19)-triene-1,3-diol, 25-[(trimethylsilyloxy)-, (3β,5Z,7E)-

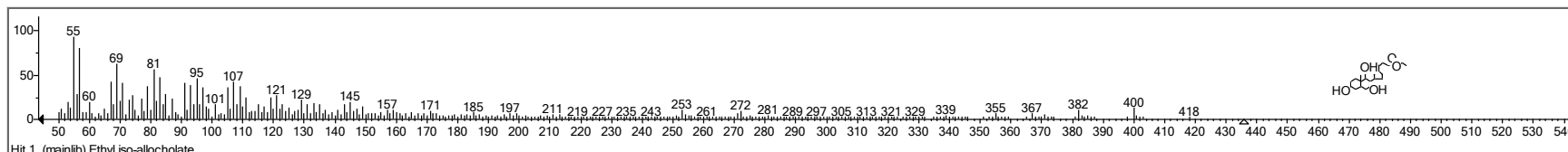
9,10-Secocholesta-5,7,10(19)-triene-1,3-diol, 25-[(trimethylsilyloxy)-, (3β,5Z,7E)-

Lib : NIST



## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

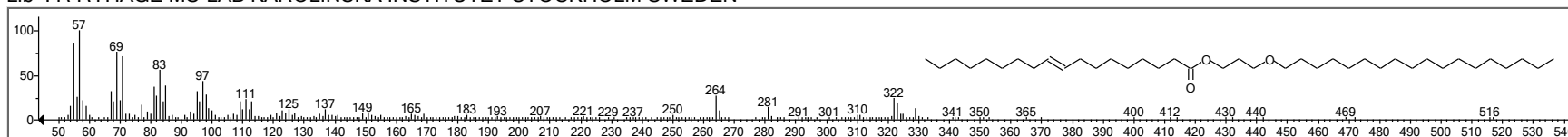
Spectrum pada RT = 26.693 menit



Hit 1. (mainlib) Ethyl iso-allocholate

**Ethyl iso-allocholate**

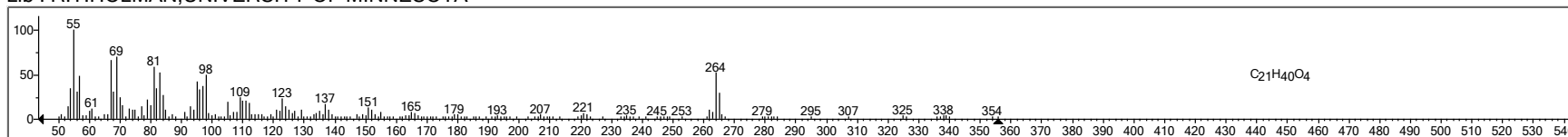
Lib : R RYHAGE MS-LAB KAROLINSKA INSTITUTET STOCKHOLM SWEDEN



Hit 2. (mainlib) Oleic acid, 3-(octadecyloxy)propyl ester

**Oleic acid, 3-(octadecyloxy)propyl ester**

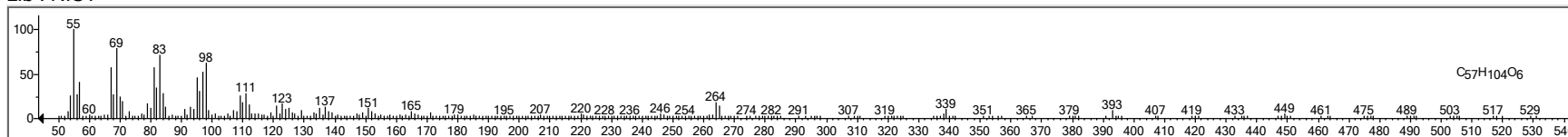
Lib : R.T.HOLMAN,UNIVERSITY OF MINNESOTA



Hit 3. (mainlib) 9-Octadecenoic acid (Z)-, 2-hydroxy-1-(hydroxymethyl)ethyl ester

**β-Monoolein**

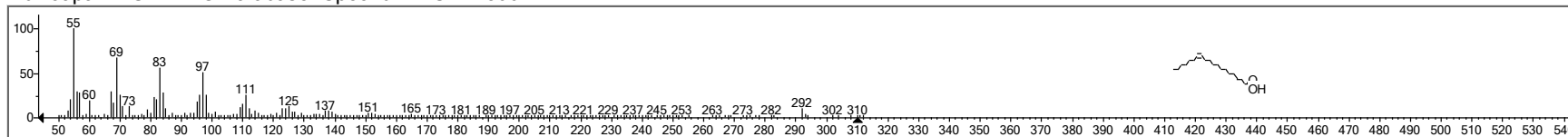
Lib : NIST



Hit 4. (mainlib) 9-Octadecenoic acid, 1,2,3-propanetriyl ester (E,E,E)-

**9-Octadecenoic acid, 1,2,3-propanetriyl ester, (E,E,E)-**

Lib : Japan AIST/NIMC Database- Spectrum MS-IW-5067



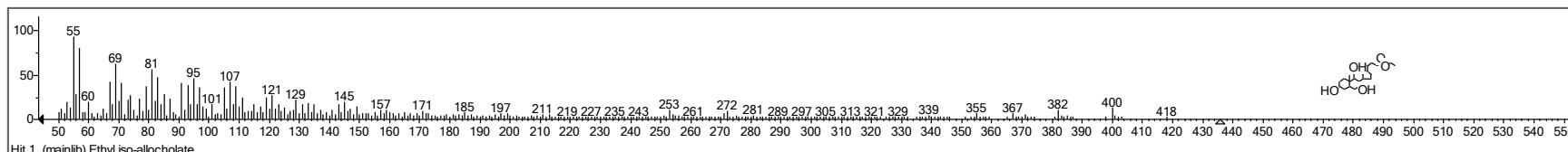
Hit 5. (mainlib) cis-13-Eicosenoic acid

**cis-13-Eicosenoic acid**

NIST Mass Spectrometry Data Center

## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

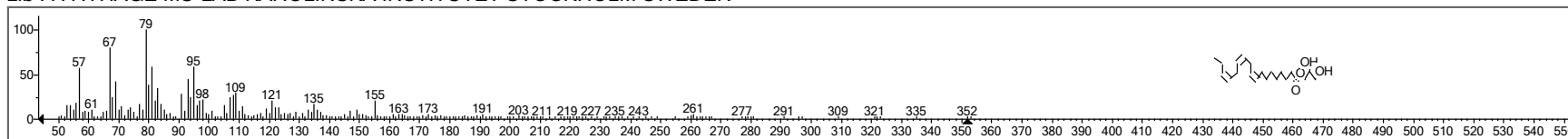
Spectrum pada RT = 26.863 menit



Hit 1. (mainlib) Ethyl iso-allocholate

**Ethyl iso-allocholate**

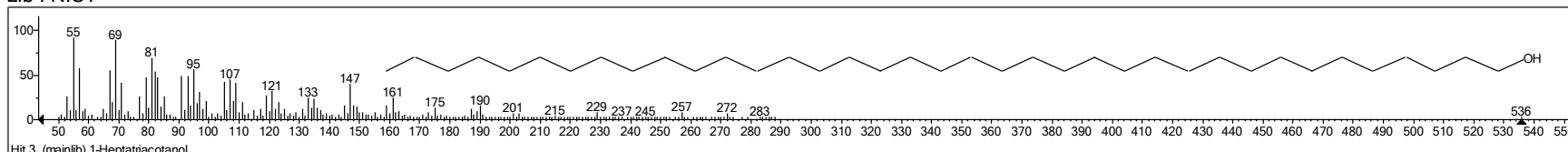
Lib : R RYHAGE MS-LAB KAROLINSKA INSTITUTET STOCKHOLM SWEDEN



Hit 2. (mainlib) 9,12,15-Octadecatrienoic acid, 2,3-dihydroxvoropovl ester. (Z,Z,Z)-

**Linolenin, 1-mono-**

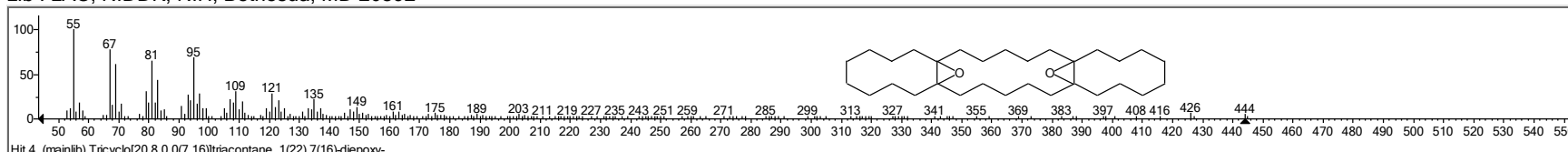
Lib : NIST



Hit 3. (mainlib) 1-Heptatriacotanol

**1-Heptatriacotanol**

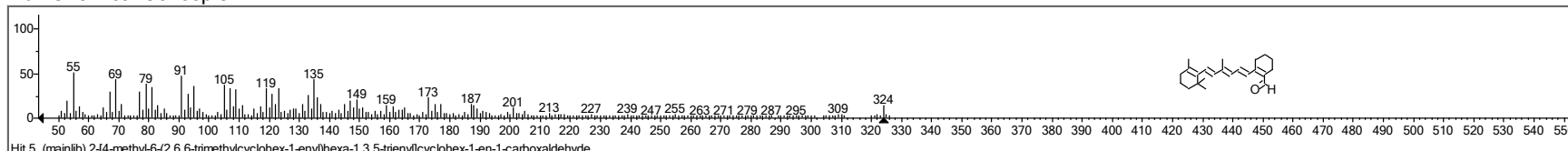
Lib : LAC, NIDDK, NIH, Bethesda, MD 20892



Hit 4. (mainlib) Tricyclo[20.8.0.0(7,16)]triacotane, 1(22),7(16)-diepoxy-

**Tricyclo[20.8.0.0(7,16)]triacotane, 1(22),7(16)-diepoxy-**

Lib : Chemical Concepts



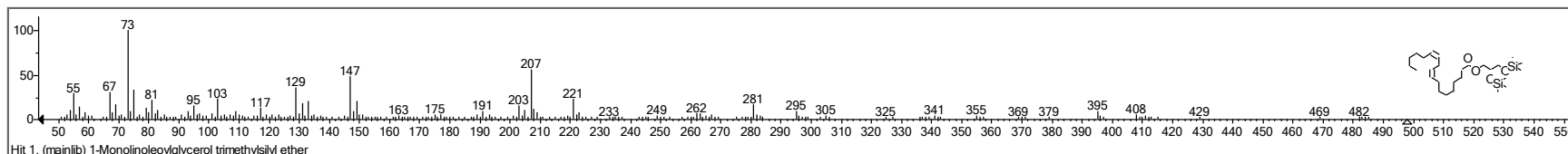
Hit 5. (mainlib) 2-[4-methyl-6-(2,6,6-trimethylcyclohex-1-enyl)hexa-1,3,5-trienyl]cyclohex-1-en-1-carboxaldehyde

**2-[4-methyl-6-(2,6,6-trimethylcyclohex-1-enyl)hexa-1,3,5-trienyl]cyclohex-1-en-1-carboxaldehyde**

Lib ; A.S.Moskovkin, I.M.Karnaukh, Russian Center on Disaster Medicine

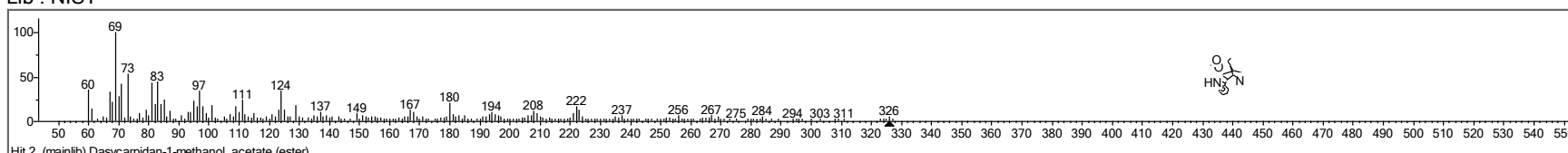
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 27.063 menit



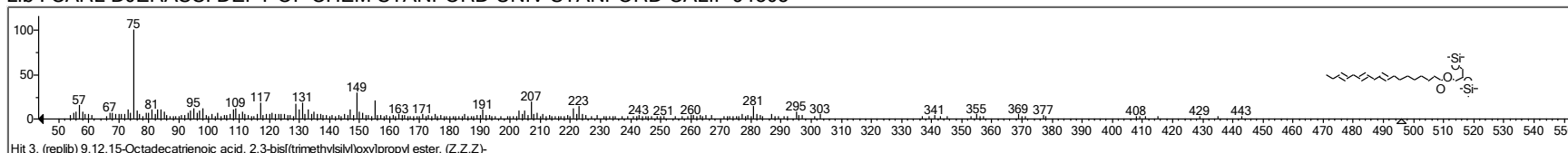
1-Monolinoleoylglycerol trimethylsilyl ether

Lib : NIST



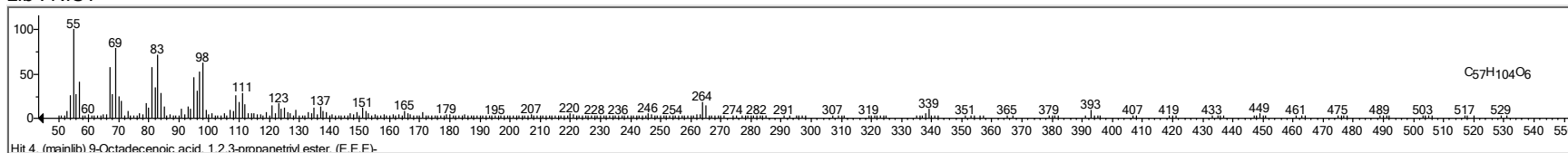
Dasycarpidan-1-methanol, acetate (ester)

Lib : CARL DJERASSI DEPT OF CHEM STANFORD UNIV STANFORD CALIF 94305



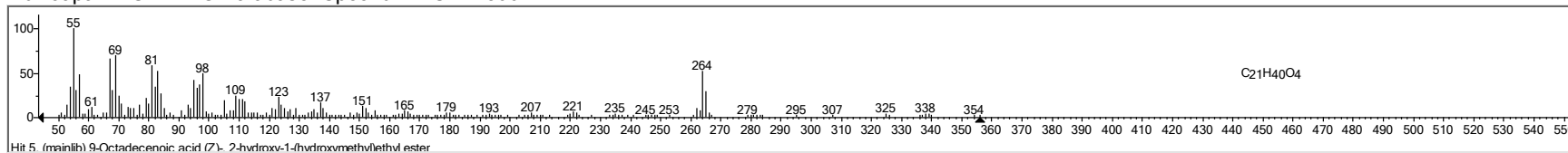
9,12,15-Octadecatrienoic acid, 2,3-bis[(trimethylsilyloxy)propyl] ester, (Z,Z,Z)-

Lib : NIST



9-Octadecenoic acid, 1,2,3-propanetriyl ester, (E,E,E)-

Lib : Japan AIST/NIMC Database- Spectrum MS-IW-5067

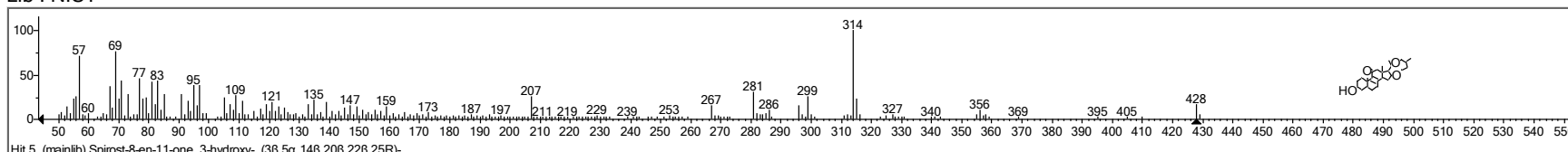
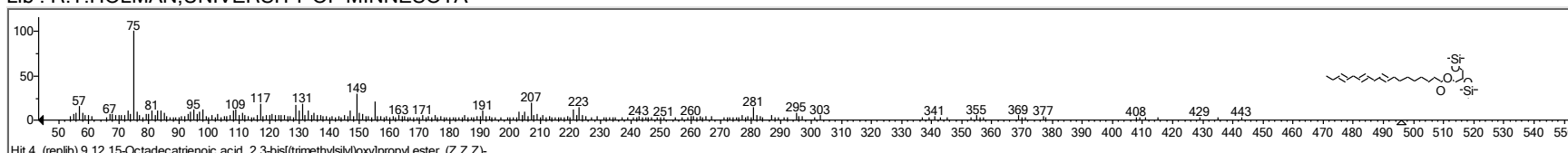
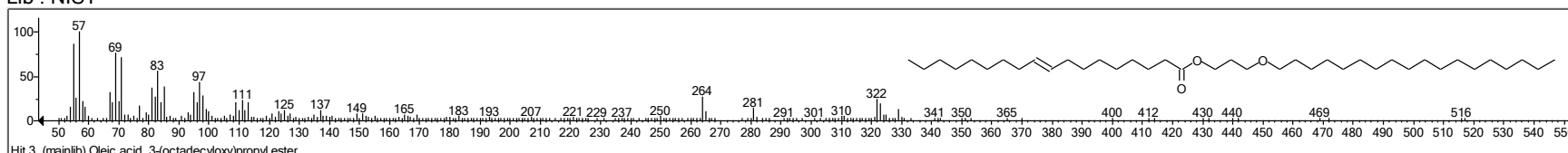
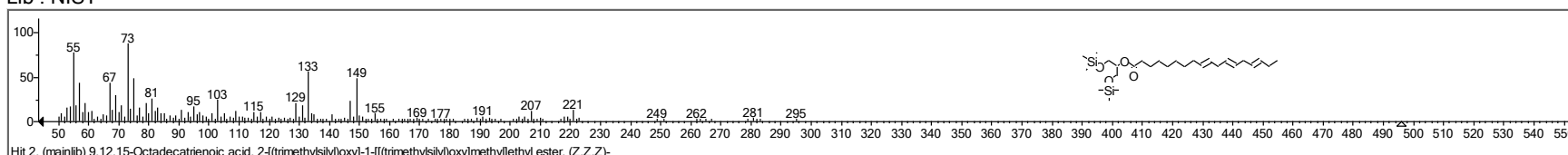
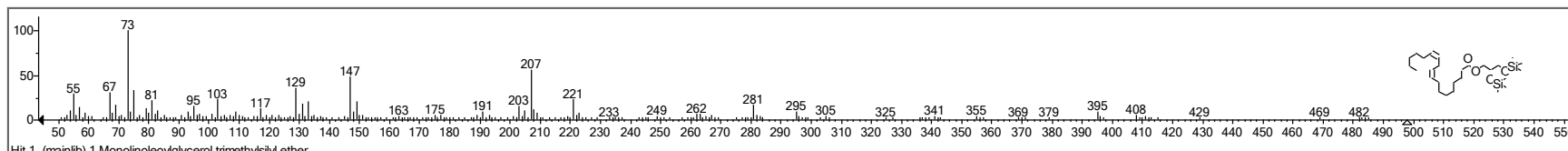


$\beta$ -Monoolein

Lib : NIST

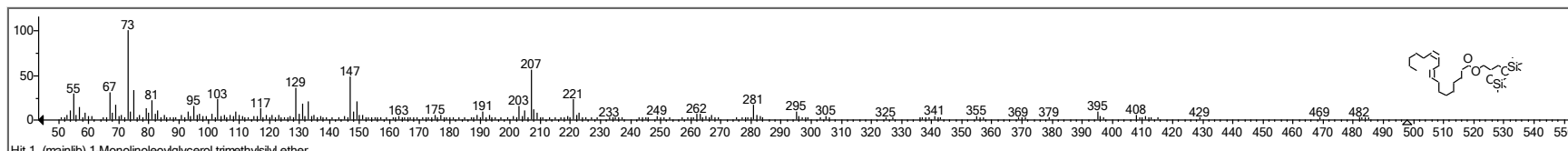
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 27.629 menit



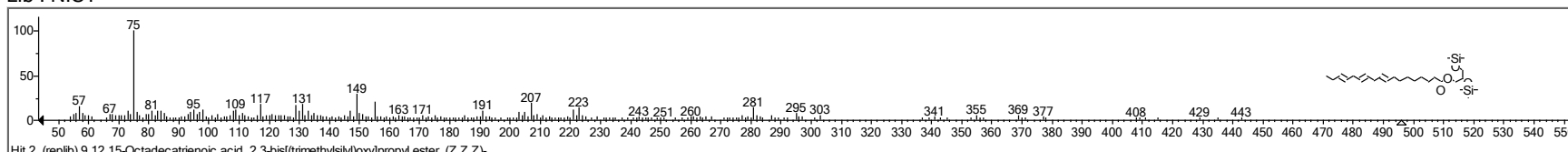
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 27.949menit



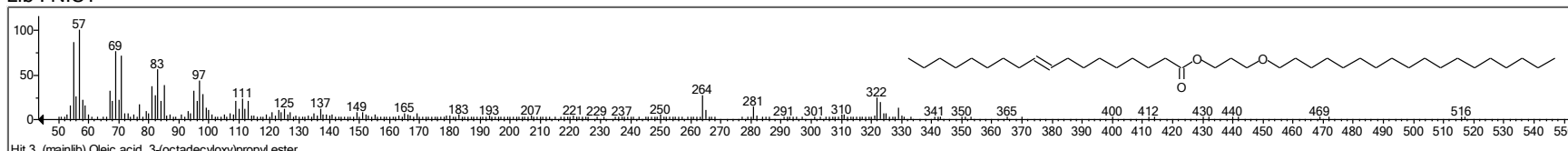
1-Monolinoleoylglycerol trimethylsilyl ether

Lib : NIST



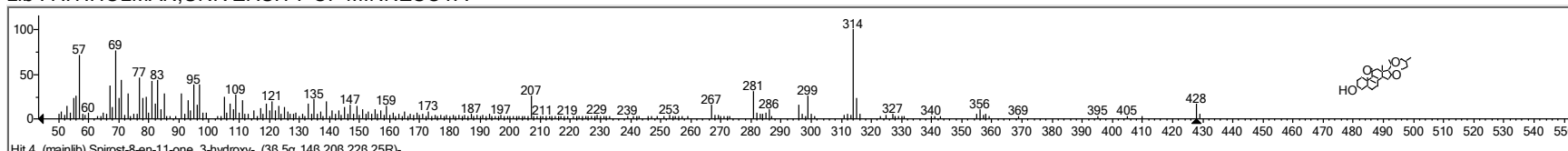
9,12,15-Octadecatrienoic acid, 2,3-bis(trimethylsilyloxy)propyl ester, (Z,Z,Z)-

Lib : NIST



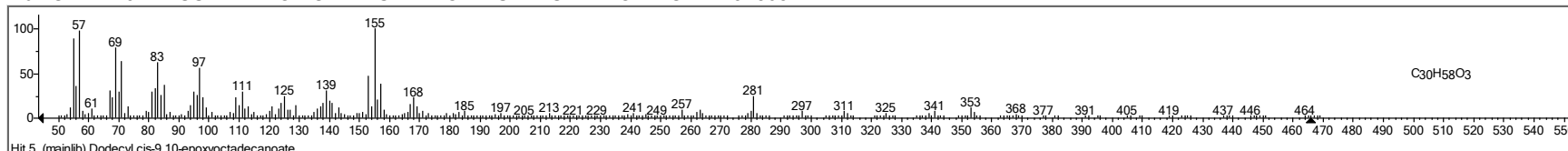
Oleic acid, 3-(octadecyloxy)propyl ester

Lib : R.T.HOLMAN,UNIVERSITY OF MINNESOTA



Spirost-8-en-11-one, 3-hydroxy-, (3β,5α,14β,20β,22β,25R)-

Lib : CARL DJERASSI DEPT OF CHEM STANFORD UNIV STANFORD CALIF 94305

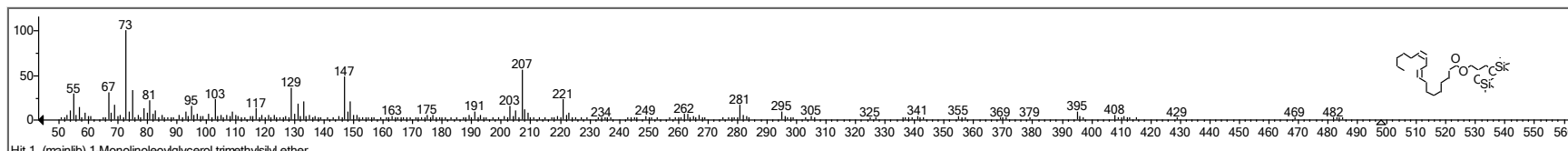


Dodecyl cis-9,10-epoxyoctadecanoate

Lib : Japan AIST/NIMC Database- Spectrum MS-IW-4723

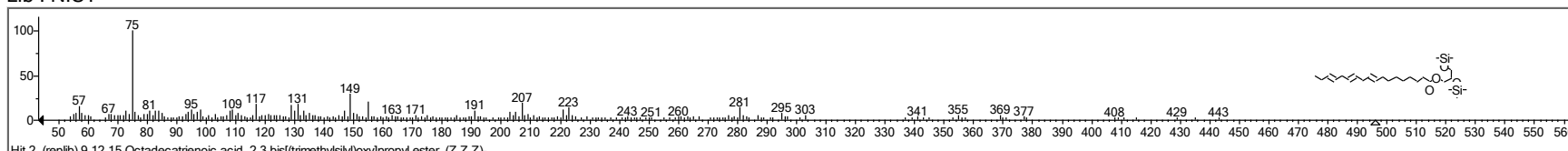
## SPEKTRUM HASIL ANALISA GC-MS METIL ESTER

Spectrum pada RT = 28.284 menit



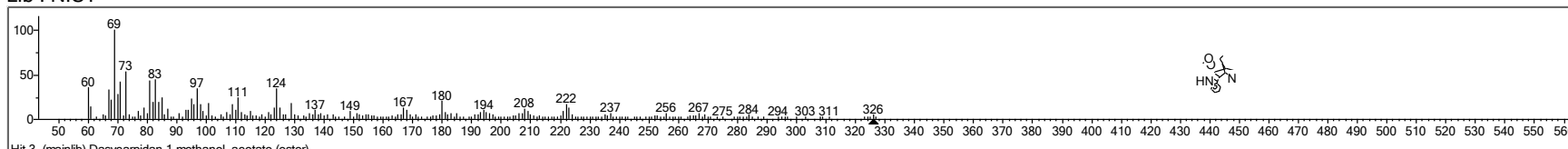
1-Monolinoleoylglycerol trimethylsilyl ether

Lib : NIST



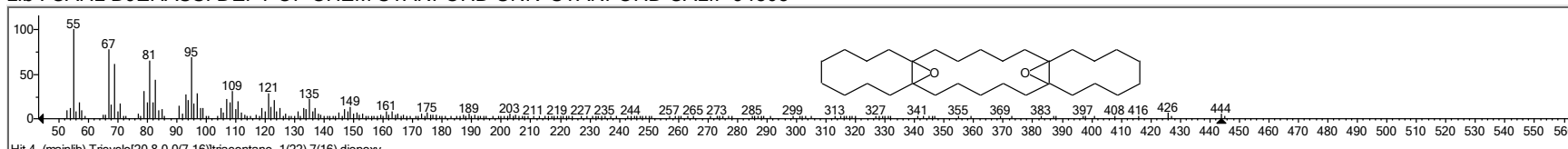
9,12,15-Octadecatrienoic acid, 2,3-bis(trimethylsilyloxy)propyl ester, (Z,Z,Z)-

Lib : NIST



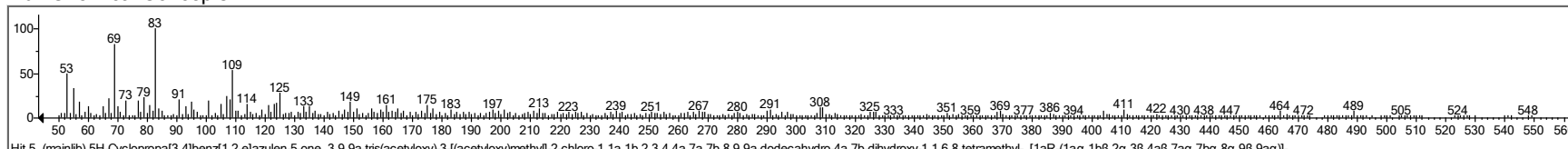
Dasycarpidan-1-methanol, acetate (ester)

Lib : CARL DJERASSI DEPT OF CHEM STANFORD UNIV STANFORD CALIF 94305



Tricyclo[20.8.0.0(7,16)]triacontane, 1(22),7(16)-diepoxy-

Lib : Chemical Concepts



5H-Cyclopropa[3,4]benz[1,2-e]azulen-5-one, 3,9,9a-tris(acetyloxy)-3-[(acetyloxy)methyl]-2-chloro-1,1a,1b,2-

Lib : DKFZ HD SCHMIDT, HEIDELBERG, GERMANY, F.R.G.