



# Contract analysis HPLC & Mass spectrometry

## RP-HPLC Mass Spectrometric analysis (P/N: LCMS-11)

Samples are separated by the high resolution reverse phase columns, which we have developed and mass spectrometric analyses can be performed by the use of an ion trap instrument.

Results can be offered: RP-HPLC analysis and MS data (the major peak).

Required amount of sample: about 0.5 mg ~

Lead time: basically 5 working days, reporting by e-mail.

### Options:

- Data-reports in printed materials or CD-ROM
- Discussion/consultation concerning the results (within 30 days after reports at HiPep Laboratories, max. 2 hours)
- MS for non-major peaks
- MS/MS analysis (partial sequence information/data base search)

**Instruments:** Agilent 1100 (Agilent Technologies, Inc.), Prominence (Shimadzu), HCT ultra or HCT plus (Bruker daltonics K.K.)

Column: HiPep-Cadenza C18 or HiPep-Intrada (HiPep Laboratories)



Agilent 1100 with HCT ultra



Prominence with HCT plus

## MALDI-TOF-MS analysis (P/N: MALDI-21)

Required amount of sample: about 0.1 mg ~

Lead time: basically 5 working days, reporting by e-mail.

### Available Options:

- Data-reports in printed materials or CD-ROM
- Discussion/consultation concerning results (within 30 days after reports at HiPep Laboratories, max 2 hours)
- **MALDI-TOF-MS/MS (P/N: MALDI-21a):** desired parent ion can be further analyzed.
- Required amount of sample: 0.5 mg ~, Lead time: basically 5 working days
- Detailed MS/MS analysis with high energy CID\* (**P/N: MALDI-21b**)
- \*discrimination of Leu and Ile can be performed by high-energy CID, also amino acid analysis (separate service). Lead time: basically 5 working days as above.
- MS/MS sequence homology search (from protein database)

(**P/N: MALDI-21c**) Lead time as above

**Instruments:** ultraflex III (Bruker daltonics K.K.)



Ultraflex III

**[Literatures to indicate our activities]** upon requests reprints are available

1. Nokihara, K., Kasama, T., Tominaga, Y., Kitagawa, A., Hirata, A., Ohya, T. and Yazawa, I., Amino Acids 48 (2016) 2491-2499.
2. Nokihara, K., Tominaga, Kitagawa, A., Hirata, A. and Kasama, T. Peptide Science 2015, H. Hojo, T. Inazu, H. Katayama (eds.) The Japanese Peptide Society, pp 69-72, 2016.
3. Hirata, A., Nokihara, K., Kawamoto, Y., Bando, T., Sasaki, A., Ide, S. Maeshima, K, Kasama, T., and Sugiyama, H., J. Am. Chem. Soc. 136 (2014) 11546-11554.
4. Nokihara, K., Yajima, S., Hirata, A., Sogon, T, and Yasuhara, T., FEBS Lett 587 (2013) 673-676.

## General conditions for analyses

- Lead time will be changed due to an options, contracts status, connective holidays etc.
- All information regarding the sample including the analytical results will be handling as confidentially.
- Conditions of analysis are followed by our regulations (see home page). Unless without written agreement all contracts are carried out under confidentiality, however individual contracts on our routine service are charged for lawyers supervision fee.
- Basically, we will discard the rest of the samples, although returning of the remaining samples will be charged for additional expenses for packing and returning.
- We accept consultation of the resulted data and advising for further R and D methods.
- The amounts of samples described above are basically based on our experiences. It will be possible to analyze even smaller amount. Please consult us. (GMP, GLP analyses are not allowed)

