

 **funakoshi**  
FRONTIERS IN LIFE SCIENCE

*plus*   
MRM

**We have just released**

## **MRMplus Standard Peptides (Cat #FMI-\*\*\*\*\*)**

**-Internal standards for quantification of your target proteins**

## **MRMplus Retention Time Marker (Cat #FMR-002)**

**-To know retention time of your target in your LC system**

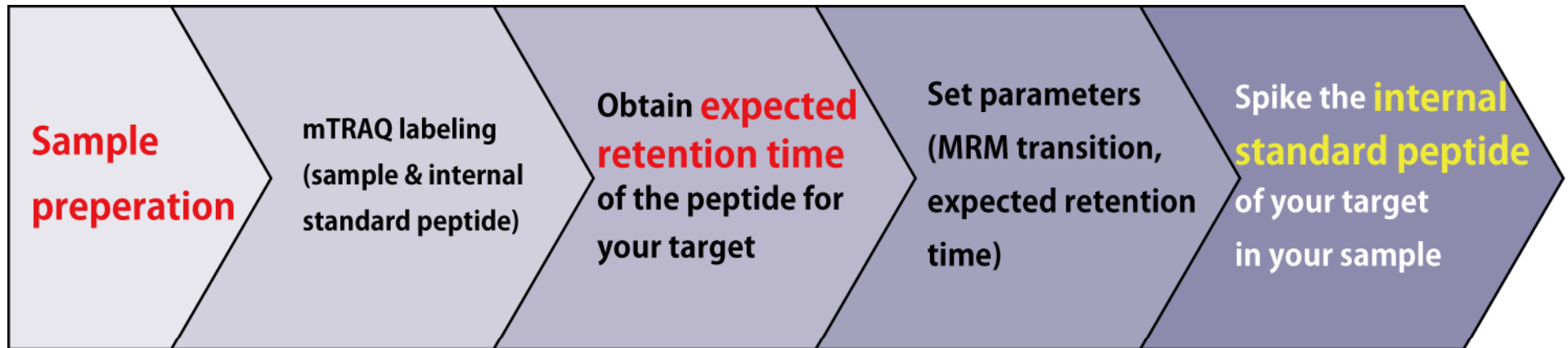
## **Proteomics Sample Preparation Kit for Cultured Cell (Cat #FMR-001)**

**-Preparing LC-MS sample from cultured cell**

**\*These Products are licensed from Kyushu University**

# Introduction

## Procedure for quantitative analysis by MRM



↑  
**Proteomics Sample Preparation Kit for Cultured Cell**

↑  
**MRMplus Retention Time Marker**

↑  
**MRMplus Standard Peptides**

**FUNAKOSHI offer these Reagents for MRM analysis**

↓  
**MRMplus** MRM *plus*

# MRMplus Standard Peptides

**Internal standards for quantification of your target proteins**

# MRMplus Standard Peptides

Internal standards for quantification of your target proteins

**~50,000 peptides for ~9,000 target human proteins for**

**Metabolism, Cell signaling, Transcription factor, Apoptosis, Cancer etc.**

**Each standard peptide has information for scheduled-MRM analysis such as**

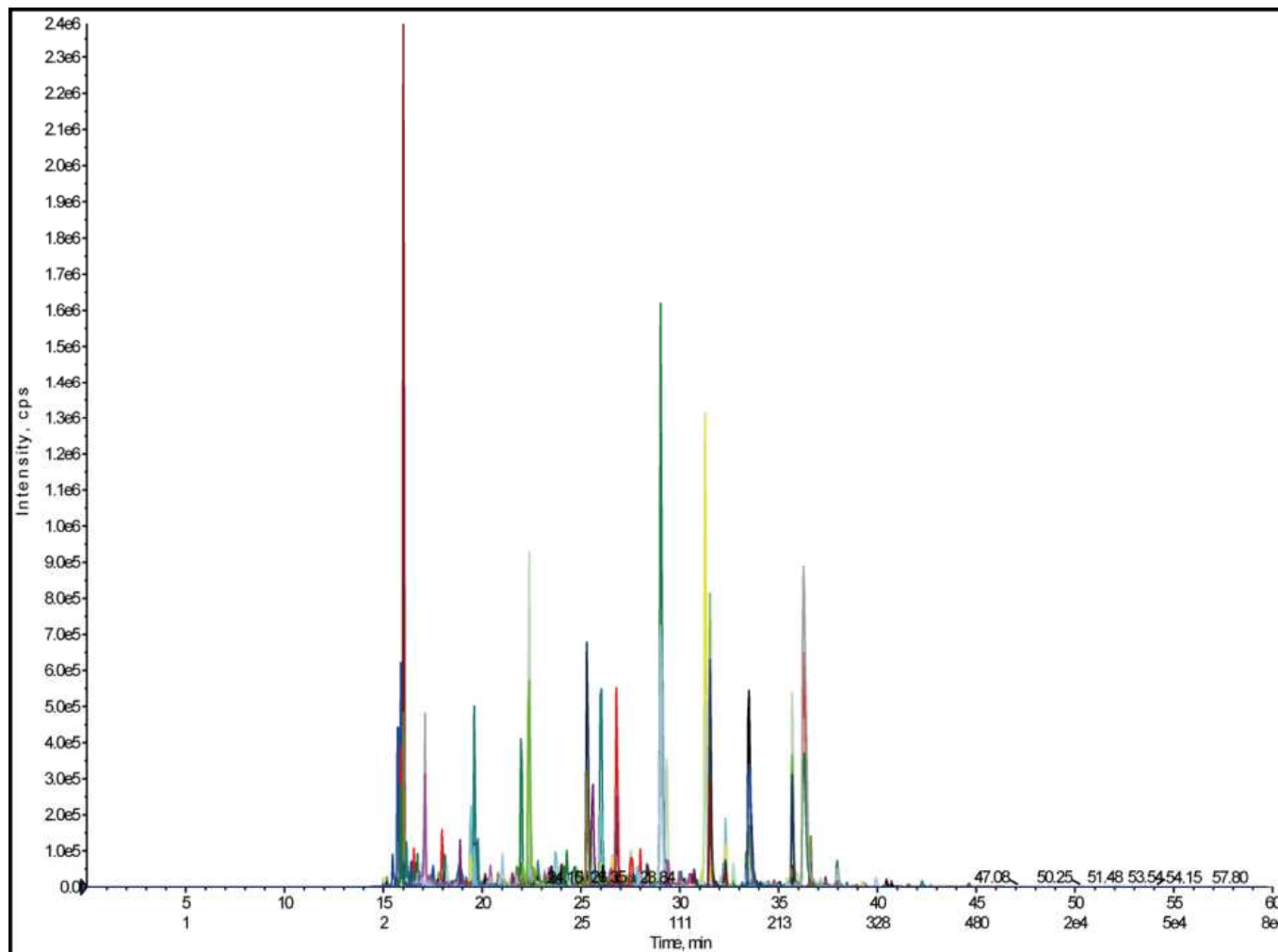
**MRM transition data (Q1, Q3)**

**Relative retention time for LC (i.e. segment information)**

**\*mTRAQ Reagent (AB Sciex Pte. Ltd) is required for using these information.**

# MRMplus Standard Peptides

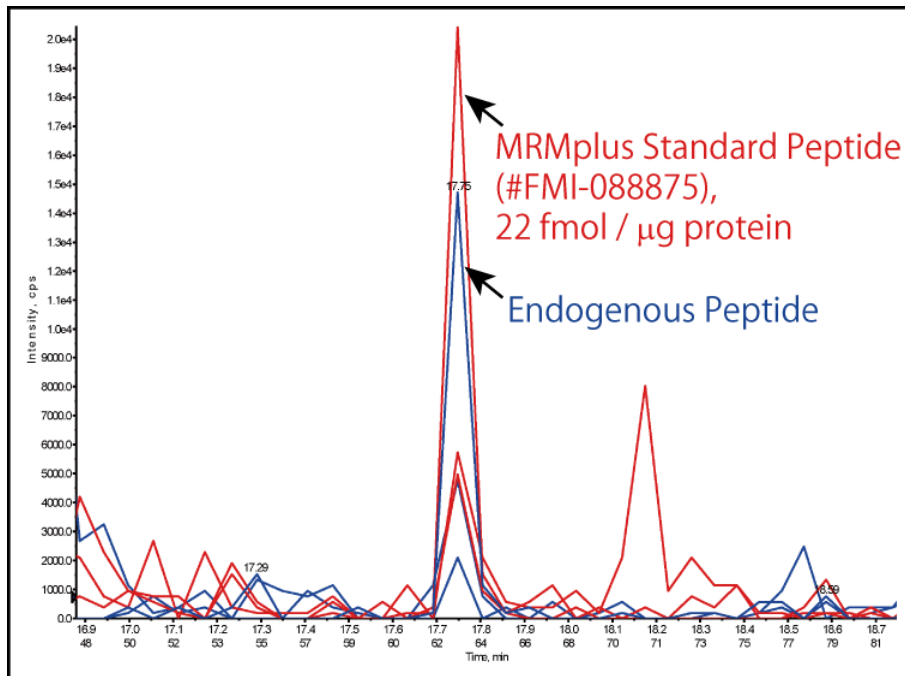
Internal standards for quantification of your target proteins



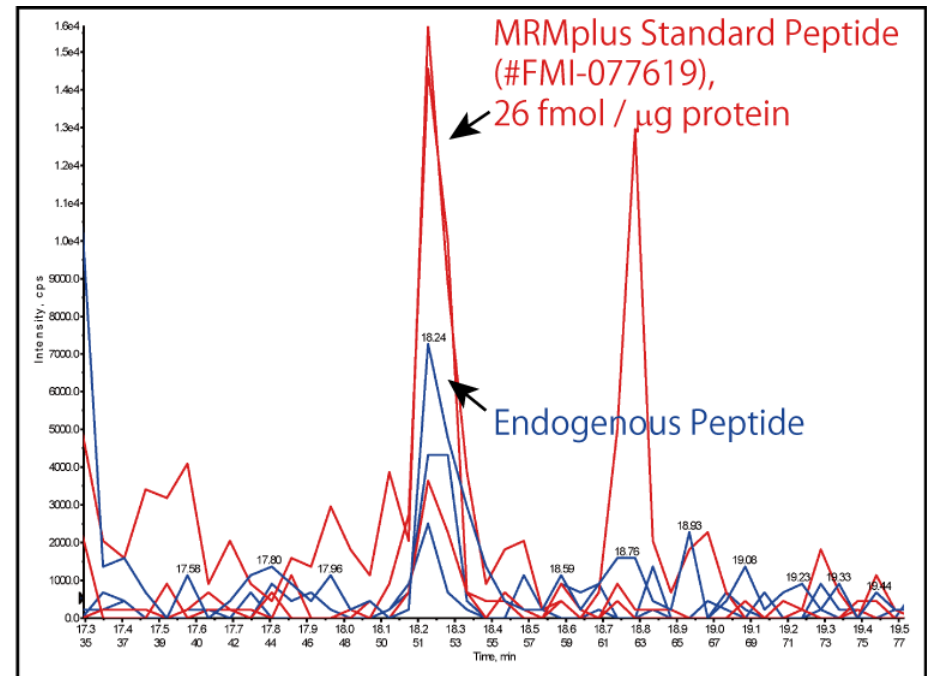
MRM analysis of 300 metabolic enzymes

# MRMplus Standard Peptides

Internal standards for quantification of your target proteins



ASNS(asparagine synthetase (glutamine-hydrolyzing))



PNP(purine nucleoside phosphorylase)

# MRMplus Standard Peptides

Internal standards for quantification of your target proteins

GeneSymbol	Gene Name	Cat #
CS	citrate synthase	FMI-005544
DHFR	dihydrofolate reductase	FMI-116689
DLAT	dihydrolipoamide S-acetyltransferase	FMI-088404
DLD	dihydrolipoamide dehydrogenase	FMI-005710
DLST	dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)	FMI-006327
DUT	deoxyuridine triphosphatase	FMI-038690
ECHS1	enoyl CoA hydratase, short chain, 1, mitochondrial	FMI-006226
AHCY	adenosylhomocysteinase	FMI-053889
ENO1	enolase 1, (alpha)	FMI-005171
ENO2	enolase 2 (gamma, neuronal)	FMI-006096
AK1	adenylate kinase 1	FMI-092862
AK2	adenylate kinase 2	FMI-093106
FH	fumarate hydratase	FMI-004528
ALDOC	aldolase C, fructose-bisphosphate	FMI-009942
GAPDH	glyceraldehyde-3-phosphate dehydrogenase	FMI-006411
PHGDH	phosphoglycerate dehydrogenase	FMI-045080
GLS	glutaminase	FMI-092425
HK1	hexokinase 1	FMI-005035
HMGCS1	3-hydroxy-3-methylglutaryl-CoA synthase 1 (soluble)	FMI-090380
IDH1	isocitrate dehydrogenase 1 (NADP+), soluble	FMI-005796
IDH2	isocitrate dehydrogenase 2 (NADP+), mitochondrial	FMI-006014
IDH3A	isocitrate dehydrogenase 3 (NAD+) alpha	FMI-004825
IDH3B	isocitrate dehydrogenase 3 (NAD+) beta	FMI-006391
IDH3G	isocitrate dehydrogenase 3 (NAD+) gamma	FMI-017973
ACAT1	acetyl-CoA acetyltransferase 1	FMI-005326
ACAT2	acetyl-CoA acetyltransferase 2	FMI-005137
MDH1	malate dehydrogenase 1, NAD (soluble)	FMI-010667
MDH2	malate dehydrogenase 2, NAD (mitochondrial)	FMI-091811

>300 MRMplus Standard Peptides for metabolic enzymes are **in stock!**



# MRMplus Retention Time Marker

To know retention time of your target in your LC system

# MRMplus Retention Time Marker

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**MRM** *plus*

To know retention time of your target in your LC system

## 12 marker peptides mix

-to get expected retention time (RT) of MRMplus Standard Peptides for your targets.

## Suitable for high-throughput profiling by scheduled-MRM

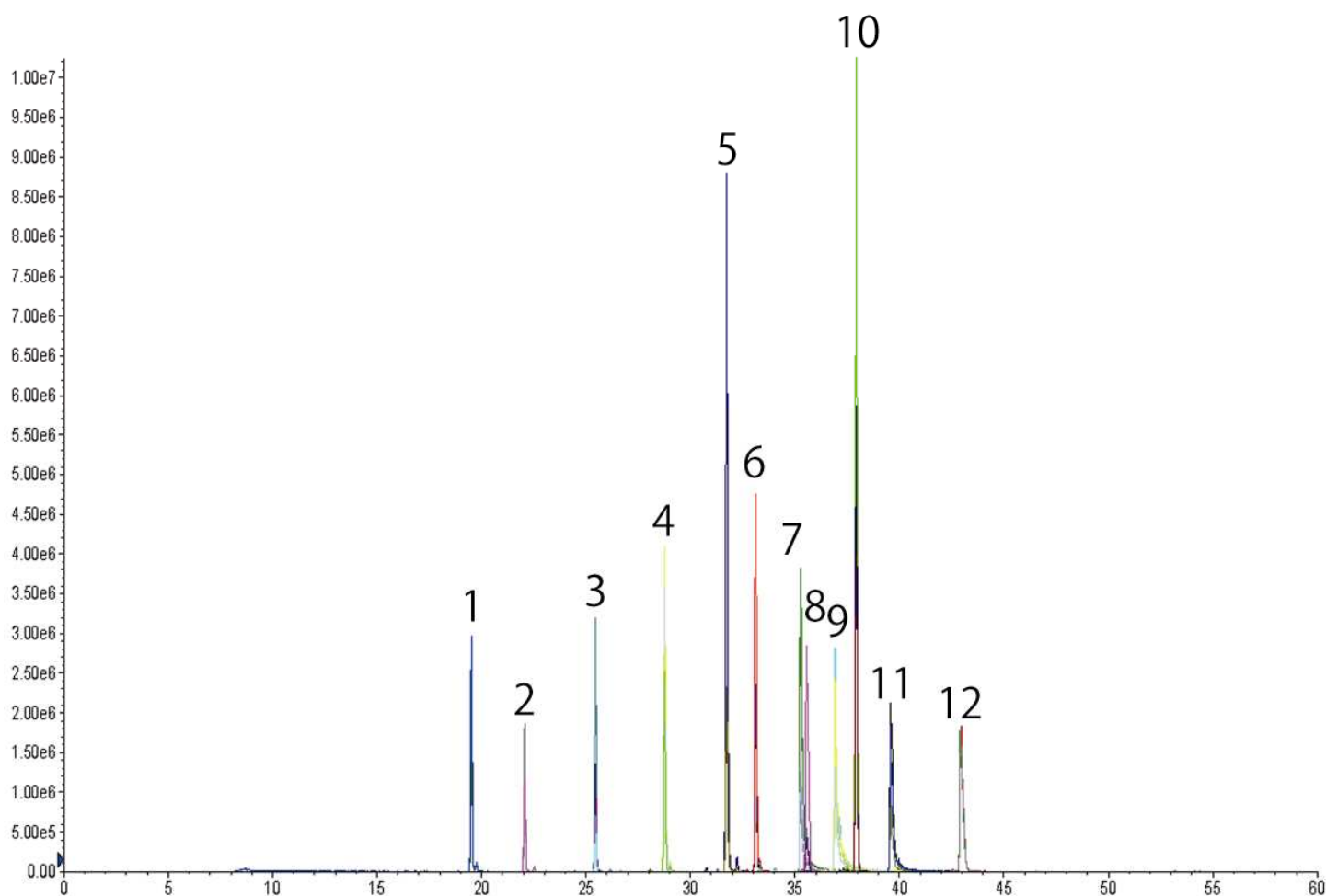
-allows to measure multiple targets in one MRM profile.

## The conversion software is provided

- to convert relative RT to the expected RT in your system.

# MRMplus Retention Time Marker

To know retention time of your target in your LC system



**Instrument: QTRAP6500 (AB Sciex)**

**Injection: 1/200 diluted 0.2 ul, Gradient: 5-45B/40 min\_250 nl/min**

# Proteomics Sample Preparation Kit for Cultured Cell

Suitable for preparing LC-MS sample from cultured cell



# Proteomics Sample Preparation Kit for Cultured Cell



Suitable for preparing LC-MS sample from cultured cell

**This kit contains the reagents for**

- cell lysis
- protease digestion

**Follows the original sample preparation protocol of Kyushu Univ.**

**Especially for MRM analysis with mTRAQ reagent.**

**10 samples can be treated.**

# Summary

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- 1. MRMplus Standard Peptides (Cat #FMI-\*\*\*\*\*)**  
-Internal standards for quantification of your target proteins
  
- 2. MRMplus Retention Time Marker (Cat #FMR-002)**  
-To know retention time of your target in your LC system
  
- 3. Proteomics Sample Preparation Kit for Cultured Cell (Cat #FMR-001)**  
-Preparing LC-MS sample from cultured cell

**\*These Products are licensed from Kyushu University**

# Contact us!

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## For the customer in Japan

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## For the customer outside Japan

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[export@funakoshi.co.jp](mailto:export@funakoshi.co.jp)

Please visit our booth #24!

Thank you!

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