

Rapid-Trypsin (MS)

R1456327

Storage at -20°C (24 months). Avoid freeze/thaw cycle.

Introduction:

In proteomic analysis, reliable and reproducible results are highly dependent on stable sample preparation. The sample preparation process is cumbersome and time-consuming, usually involving an overnight incubation and enzymatic hydrolysis process of 16-18 hours. Balancing speed and enzymatic cleavage completeness during the enzymatic hydrolysis process is an ongoing challenge. Fast Trypsin (Mass Spectrometry Grade) is a mass spectrometry-grade genetic engineering enzyme that can complete the enzymatic hydrolysis process in proteomic research within 3 hours. It can specifically cleave the C-terminal peptide bonds of lysine (K) and arginine (R), and is suitable for various types of samples, including but not limited to samples derived from animal tissues, cell samples, and IP samples.

Product Applications:

It can be used in peptide mapping analysis, protein sequence analysis, and the proteolytic process in proteomic research.

Product Features:

1. Efficient enzymatic hydrolysis: The enzymatic hydrolysis time is shortened to less than 3 hours, saving the time for sample pretreatment.
2. High purity: Free of other contaminating proteases, with a purity of $\geq 95\%$.
3. High stability: Each batch of products undergoes strict quality control to ensure stability between batches.
4. Animal origin-free: This product is recombinantly expressed, and no animal-derived materials are used in the production process, thus avoiding exogenous virus contamination.

Product Data:

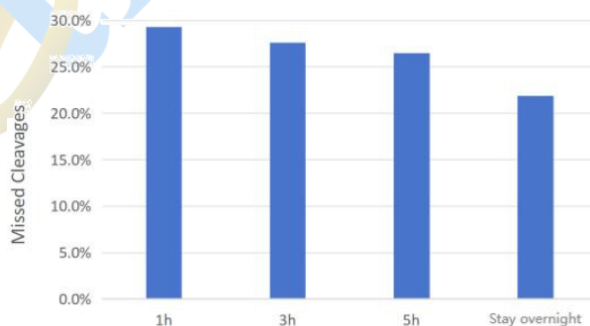


Fig.1. The results showed that Rapid-Trypsin (MS) completed the enzyme digestion in 3 h.

Component List:

R1456327	Component	100µg	10×100µg	Storage
R1456327A	Rapid-Trypsin (MS)	100µg	10×100µg	-20°C. Avoid freeze/thaw cycle.
R1456327B	Resuspension Buffer	500µl	10×500µL	-20°C. Avoid freeze/thaw cycle.

Operating Procedures:

1. It is recommended to dissolve the Rapid-Trypsin (MS) lyophilized powder using 50mM acetic acid solution. For example: Take 1 tube of 20µg Rapid-Trypsin (MS) lyophilized powder, add 40µL of 50mM acetic acid solution, and dissolve by vortexing to prepare a 0.5µg/µL Rapid-Trypsin (MS) solution. Aliquot into 8 tubes, 5µL per tube, for storage.
2. The recommended usage ratio of Rapid-Trypsin (MS) is Rapid-Trypsin (MS) : target protein = 1:20 (mass ratio). For instance, 1µg of Rapid-Trypsin (MS) can digest 20µg of total protein. (The recommended digestion time is 3-4 hours; for hard-to-digest proteins or complex samples, the digestion time can be extended to 6 hours.)

Precautions and Disclaimer:

This product is limited to scientific research use by professionals. It must not be used for clinical diagnosis or treatment, nor for food or pharmaceutical purposes.