

## Pepsin (MS Grade)

Cat. No.:	HY-E70198		
CAS No.:	9001-75-6		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month

## Pepsin (MS Grade)

### BIOLOGICAL ACTIVITY

<b>Description</b>	Pepsin (MS Grade) is the major pig and human gastric proteases, it is a pepsin-like minor gastric proteolytic enzymes. Pepsin (MS Grade) contributes to proteolysis of food proteins in the vertebrate stomach <sup>[1]</sup> .
<b>In Vitro</b>	<p>This product can be used for: 1) protein analysis in mass spectrometry and other applications; 2) for structural protein research (HDX exchange) and antibody analysis; 3) for digestion of tightly folded proteins in proteomics; 4) digestion of casein for vaccine production protein.</p> <p>Protocol</p> <ol style="list-style-type: none"><li>1) Dissolve the target protein: Dissolve the protein in pH 1.0-5.0 buffer;</li><li>2) Enzyme dissolution: Dissolve pepsin powder in double-distilled water. Note that the pH should be lower than 5.5 so that the final concentration of pepsin is 1 mg/mL;</li><li>3) Enzyme digestion: Add pepsin to the target protein solution. The recommended ratio is enzyme: protein = 1:20-1:100 (W:W). After mixing, react at 37° for 1-18 hours and heat at 95°. Stop the reaction after 10 minutes.</li></ol> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

- [1]. K.Yamamoto, et al. Cathepsin E: An Aspartic Protease with Diverse Functions and Biomedical Implications. Encyclopedia of Cell Biology. 2016.
- [2]. Jordan Tang. Chapter 3 - Pepsin A. Handbook of Proteolytic Enzymes. 2013.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA