JESTAGE				My J-STAGE Sign in
Food Science and Technology Inte	rnational,	Tokyo	Japan f Science	nese Society or Food and Technology
Available Issues Japanese			>>	Publisher Site
Author: ADVANCED Keyword: Search	Volume	Page		Go
Add to Favorite/Citation Articles Alerts	Add to Favorite Publications	s 👌	Register Alerts	? My J-STAGE HELP
TOP > Available Issues > Table of Contents > A	bstract			
			ONLINE PRINT	2 ISSN : 1881-3976 ISSN : 1341-7592

Food Science and Technology International, Tokyo

Vol. 4 (1998), No. 1 pp.44-47

[PDF (524K)] [References]

Aggregate Formation of Peptic Globin Digest

Yuji MIYAGUCHI¹⁾, Masakazu TSUTSUMI¹⁾ and Kiyomi NAGAYAMA¹⁾

1) School of Agriculture, Ibaraki University

(Received: June 12, 1997) (Accepted: November 8, 1997)

Peptic globin digest (PG) was prepared from porcine blood globin, and the peptides were characterized by separation processes such as gel filtration chromatography, hydrophobic chromatography and sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE). Aggregation of the peptides was indicated by high-performance liquid chromatography (HPLC). Two fractions (F1 and F2) were obtained from PG by gel filtration chromatography. Hydrophobic chromatography of fraction F1 was carried out, and a peak corresponding to the aggregate was found in fractions F1b-F1e. These fractions, which showed an aggregate peak by HPLC, were subjected to SDS-PAGE, and two major peptide bands with molecular weight of 5000 and 6000 were found. Amino acid sequence indicated the N-terminal amino acid of these peptides to be 42-47 (Phe-Asp) and 86-92 (Ala-Leu) of β -globin, respectively. Furthermore, it was predicted that the Mw 5000 and 6000 peptides may possibly be 42-85 (Mw 4749) and 86-141 (Mw 6117) of β -globin, respectively, based on the specificity of pepsin.

Keywords: globin, aggregation, gelation, pepsin digestion, hydrophobic chromatography

[PDF (524K)] [References]

Download Meta of Article[<u>Help</u>] <u>RIS</u> BibTeX

To cite this article:

Yuji MIYAGUCHI, Masakazu TSUTSUMI and Kiyomi NAGAYAMA, Aggregate Formation of Peptic Globin Digest *FSTI*. Vol. **4**, 44-47. (1998) .

doi:10.3136/fsti9596t9798.4.44

JOI JST.JSTAGE/fsti9596t9798/4.44

Copyright (c) 2009 by the Japanese Society for Food Science and Technology



Japan Science and Technology Information Aggregator, Electronic JSTAGE