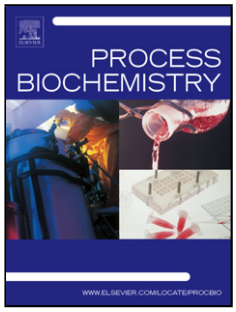


Title: Isolation and characterisation of antioxidative peptides from bromelain-hydrolysed brown rice protein by proteomic technique

Authors: Orrapun Selamassakul, Natta Laohakunjit, Orapin Kerdchoechuen, Liping Yang, Claudia S. Maier

PII: S1359-5113(17)31771-3
DOI: https://doi.org/10.1016/j.procbio.2018.03.024
Reference: PRBI 11309

To appear in: *Process Biochemistry*

Received date: 8-12-2017
Revised date: 5-3-2018
Accepted date: 26-3-2018

Please cite this article as: Selamassakul Orrapun, Laohakunjit Natta, Kerdchoechuen Orapin, Yang Liping, Maier Claudia S.Isolation and characterisation of antioxidative peptides from bromelain-hydrolysed brown rice protein by proteomic technique.*Process Biochemistry* https://doi.org/10.1016/j.procbio.2018.03.024

/ฺIsolation and characterisation of antioxidative peptides from bromelain-hydrolysed brown rice protein by proteomic technique

Orrapun Selamassakul[a], Natta Laohakunjit[a,*], Orapin Kerdchoechuen[a], Liping Yang[b], and Claudia S. Maier[b]

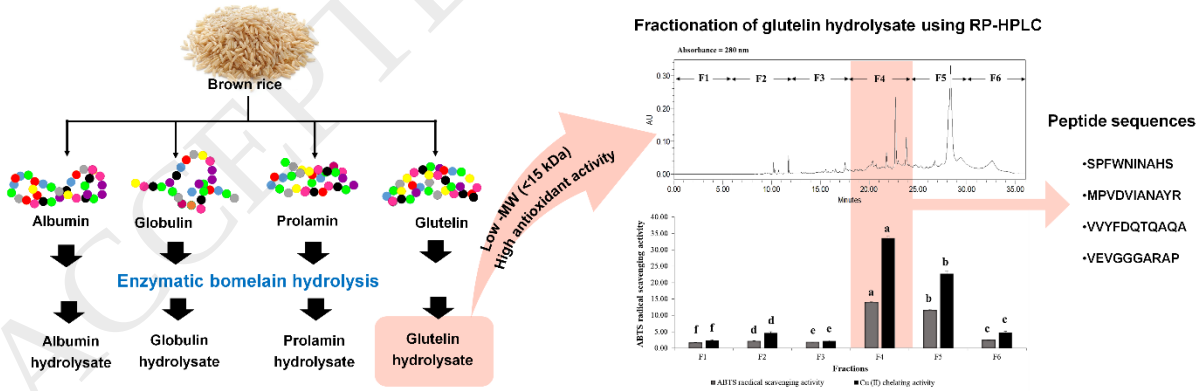
[a] *Division of Biochemical Technology, School of Bioresources and Technology, King Mongkut's University of Technology Thonburi, 49 Teintalay Rd., Thakam, Bangkhuntein, Bangkok 10150, Thailand*

[b] *Department of Chemistry, Oregon State University, Corvallis, OR 97331, USA*

* Corresponding author; Tel. +66 2 470 7752; fax: +66 2 470 7781

E-mail address: nutta.lao@kmutt.ac.th

Graphical abstract



LC-ESI-MS/MS shows that the hydrolysis of brown rice glutelin fraction with bromelain produces low-MW peptides with hydrophobic or aromatic N-terminal residues, which can donate electrons to electron-deficient radicals and copper ions.