UNIVERSITY OF LEEDS

This is a repository copy of *Heteroprotein complex formation of bovine lactoferrin and pea protein isolate: A multiscale structural analysis.*

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/110783/

Version: Supplemental Material

Article:

Adal, E, Sadeghpour, A, Connell, S orcid.org/0000-0003-2500-5724 et al. (3 more authors) (2017) Heteroprotein complex formation of bovine lactoferrin and pea protein isolate: A multiscale structural analysis. Biomacromolecules, 18 (2). pp. 625-635. ISSN 1525-7797

https://doi.org/10.1021/acs.biomac.6b01857

© 2017, American Chemical Society. This document is the Accepted Manuscript version of a Published Work that appeared in final form in Biomacromolecules, copyright © American Chemical Society after peer review and technical editing by the publisher. To access the final edited and published work see https://doi.org/10.1021/acs.biomac.6b01857.

Reuse

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



Heteroprotein complex formation of bovine lactoferrin and pea protein isolate: A multiscale structural analysis

Eda Adal^{1,2}, Amin Sadeghpour¹, Simon Connell³, Michael Rappolt¹, Esra Ibanoglu², Anwesha Sarkar¹*.

¹Food Colloids and Processing Group, School of Food Science and Nutrition, University of Leeds, Leeds, LS2 9JT, United Kingdom,

²Gaziantep University, Food Engineering Department, 27310 Gaziantep, Turkey

³Molecular and Nanoscale Physics Group, School of Physics and Astronomy, University of Leeds, Leeds, LS2 9JT, United Kingdom.

Corresponding Author

*Email: <u>A.Sarkar@leeds.ac.uk</u>

Food Colloids and Processing Group,

School of Food Science and Nutrition, University of Leeds, Leeds, LS2 9JT, United Kingdom.



Figure S1. Solubility curve of PPI stock solution after centrifugation and filtration (1.2 g/L).



Figure S2. Raw correlograms of 0.007 mM PPI and 0.047 mM LF stock solutions, respectively.



Figure S3. Turbidity of 0.047 mM LF solution (\blacksquare), 0.007 mM PPI solution (\bullet) and mixture of 0.047 mM LF and 0.007 mM PPI solutions (\blacktriangle) (PPI/ LF molar ratio of 0.15) as a function of pH with corresponding photographs of cuvette taken immediately after mixing (a) and the zoomed-in turbidity values of coacervates in pH 5-7 region highlighting the isoelectric point (∇) (b). Error bars represent standard deviations.