### Accepted Manuscript

Title: Investigation of the thermal shift assay and its power to predict protein and virus stabilizing conditions

Authors: Dora Sviben, Branimir Bertoša, Andrea Hloušek-Kasun, Dubravko Forcic, Beata Halassy, Marija Brgles



PII:	\$0731-7085(18)30786-6
DOI:	https://doi.org/10.1016/j.jpba.2018.08.017
Reference:	PBA 12148
To appear in:	Journal of Pharmaceutical and Biomedical Analysis
Received date:	4-4-2018
Revised date:	30-7-2018
Accepted date:	7-8-2018

Please cite this article as: Sviben D, Bertoša B, Hloušek-Kasun A, Forcic D, Halassy B, Brgles M, Investigation of the thermal shift assay and its power to predict protein and virus stabilizing conditions, *Journal of Pharmaceutical and Biomedical Analysis* (2018), https://doi.org/10.1016/j.jpba.2018.08.017

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

#### Investigation of the thermal shift assay and its power to predict protein and virus

#### stabilizing conditions

Dora Sviben<sup>a,b</sup>, Branimir Bertoša<sup>c</sup>, Andrea Hloušek-Kasun<sup>c</sup>, Dubravko Forcic<sup>a,b</sup>, Beata

Halassy<sup>a,b</sup>, Marija Brgles<sup>a,b</sup>\*

<sup>a</sup>University of Zagreb, Centre for Research and Knowledge Transfer in Biotechnology,

Rockefellerova 10, HR-10000 Zagreb, Croatia

<sup>b</sup>Centre of Excellence for Viral Immunology and Vaccines, CERVirVac, Croatia

<sup>c</sup>Department of Chemistry, Faculty of Science, University of Zagreb, Horvatovac 102A, HR-

10000 Zagreb, Croatia

\*Corresponding author

Marija Brgles, PhD, University of Zagreb, Centre for Research and Knowledge Transfer in

Biotechnology, Rockefellerova 10, HR-10000 Zagreb, Croatia, Tel: +385 1 6414 313, Fax:

+385 1 6414 103, e-mail: mbrgles@gmail.com

Highlights

- Similar effect for investigated solutions on T<sub>m</sub> was found with different proteins
- Low pH destabilizes proteins probably due to differences in hydrogen bonding
- Impact of solution on  $T_m$  shift does not correlate with protein aggregation tendency
- Impact of excipients on virus stability cannot be predicted from protein  $T_m$  shifts

Download English Version:

# https://daneshyari.com/en/article/8948175

Download Persian Version:

https://daneshyari.com/article/8948175

Daneshyari.com