## Accepted Manuscript

Title: Effects of Ca<sup>2+</sup> ions on bestrophin-1 surface films

Author: Kirilka Mladenova Svetla D. Petrova Tonya D. Andreeva Veselina Moskova-Doumanova Tanya Topouzova-Hristova Yuri Kalvachev Konstantin Balashev Shomi S. Bhattacharya Christina Chakarova Zdravko Lalchev Jordan A. Doumanov



PII:	S0927-7765(16)30727-5
DOI:	http://dx.doi.org/doi:10.1016/j.colsurfb.2016.10.023
Reference:	COLSUB 8204
To appear in:	Colloids and Surfaces B: Biointerfaces
Received date:	14-7-2016
Revised date:	7-10-2016
Accepted date:	12-10-2016

Please cite this article as: Kirilka Mladenova, Svetla D.Petrova, Tonya D.Andreeva, Veselina Moskova-Doumanova, Tanya Topouzova-Hristova, Yuri Kalvachev, Konstantin Balashev, Shomi S.Bhattacharya, Christina Chakarova, Zdravko Lalchev, Jordan A.Doumanov, Effects of Ca2+ ions on bestrophin-1 surface films, Colloids and Surfaces B: Biointerfaces http://dx.doi.org/10.1016/j.colsurfb.2016.10.023

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

## Highlights

- 1. hBest1 secondary structure consists of  $3_{10}$ -helices,  $\alpha$ -helixes,  $\beta$ -turns and loops
- 2.  $Ca^{2+}$  ions induce conformational changes in the hBest1 secondary structure
- Ca<sup>2+</sup> ions cause changes in π/A isotherms and hysteresis of hBest1 monolayers
  Ca<sup>2+</sup> ions cause oligomerization, molecular and macro-organization in hBest1 films
- 5.  $Ca^{2+}$ -induced functional switch could be related to protein macro-organization

Download English Version:

## https://daneshyari.com/en/article/4983443

Download Persian Version:

https://daneshyari.com/article/4983443

Daneshyari.com