

Accepted Manuscript

Title: Role of HSP70 protein in human periodontal ligament cell function and physiology.

Authors: Michael Wolf, Jana Marciniak, Stefan Lossdörfer, Christian Kirschneck, Isabel Brauner, Werner Götz, Andreas Jäger



PII: S0940-9602(18)30125-0
DOI: <https://doi.org/10.1016/j.aanat.2018.09.006>
Reference: AANAT 51306

To appear in:

Received date: 18-2-2018
Revised date: 6-6-2018
Accepted date: 14-9-2018

Please cite this article as: Wolf, Michael, Marciniak, Jana, Lossdörfer, Stefan, Kirschneck, Christian, Brauner, Isabel, Götz, Werner, Jäger, Andreas, Role of HSP70 protein in human periodontal ligament cell function and physiology. *Annals of Anatomy* <https://doi.org/10.1016/j.aanat.2018.09.006>

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.

Title: Role of HSP70 protein in human periodontal ligament cell function and physiology.

Authors: Michael Wolf¹, Jana Marciniak^{1,2}, Stefan Lossdörfer², Christian Kirschneck³, Isabel Brauner¹, Werner Götz², Andreas Jäger²

Affiliations: ¹Department of Orthodontics, Dental Clinic, University of Aachen, Germany
²Department of Orthodontics, Dental Clinic, University of Bonn, Germany
³Department of Orthodontics, Dental Clinic, University of Regensburg, Germany

The authors declare no conflict of interest.

Corresponding author: Michael Wolf, DDS, PhD
Pauwelsstr. 30, 52074 Aachen, Germany
Phone +49-241-80-88271
Fax +49-241-80-82459
Email: michwolf@ukaachen.de

ABSTRACT

Objective: Heat pre-treatment of mechanically loaded human periodontal ligament cells (hPDL) dampens the inflammatory cellular response, as evidenced by a reduced expression of pro-inflammatory cytokines, inhibition of monocyte adhesion and osteoclastic differentiation. These findings imply heat shock proteins (HSP) as cell protective molecules acting in the PDL that are up-regulated upon ischemia caused by mechanical loading. HSP70 and its inhibition by VER155008 as the active agent in several pharmaceuticals are established targets and

Download English Version:

<https://daneshyari.com/en/article/11025891>

Download Persian Version:

<https://daneshyari.com/article/11025891>

[Daneshyari.com](https://daneshyari.com)