

Further insights into possible mechanism of mechanotransduction

Author:

Hans-Jürgen Duchstein, K. Neumann, A. Bahr, H. G. Neuland

Institution:

Institute of Pharmacy Universität Hamburg, Bundesstr. 45; 20146 Hamburg, Germany

Device and producing company:

Piezowave, Richard Wolf, Knittlingen Germany

Introduction:

Mechanotransduction is a mechanism by which cells convert mechanical stimuli into chemical activity via mechanoreceptors and following signaltransduction.

Results:

Reactive oxygen and nitrogen species, mesenchymal stem cells and heat shock proteins are involved in the mechanotransduction pathway.

Discussion:

A possible mechanism will be discussed.

Conclusion:

The correlation between the production of reactive oxygen species and heat shock proteins is under investigation.