

Turkish Journal of Medical Sciences

Turkish Journal

of



Medical Sciences

Cold Shock Proteins

N. Nuray ULUSU

E. Ferhan TEZCAN

Department of Biochemistry, Faculty of Medicine, Hacettepe University, 06100 Ankara - TURKEY

 [Keywords](#)
 [Authors](#)

Abstract: From prokaryotes to eukaryotes or from invertebrates to vertebrates, all organisms have developed various adaptive mechanisms to survive within a wide range of growth temperatures. An important part of the cold adaptation mechanism occurs at the level of the cytoplasmic membrane. Cold shock affects the membrane composition and organisation to maintain the optimum membrane function. Cold shock also affects cell division. The temperature downshift results in a growth lag. During the lag phase the organism changes the composition of the cytoplasmic membrane and synthesis sets of specific proteins called cold shock proteins or cold induced proteins.



Key Words: Antifreeze glycoproteins, cold shock proteins, membrane fluidity

medsci@tubitak.gov.tr

Turk J Med Sci 2001; **31**(4): 283-290.

Full text: [pdf](#)

Other articles published in the same issue: [Turk J Med Sci,vol.31,iss.4.](#)

[Scientific Journals Home Page](#)