



International Journal of PharmTech Research

CODEN (USA): IJPRIF, ISSN: 0974-4304, ISSN(Online): 2455-9563 Vol.9, No.11, pp 58-63, 2016

HSP70 Gene Expression in Serum and Tissue of Rat Cochlear (*Rattus norvegicus*) Due to Noise Exposure and Heat

R. YusaHerwanto¹, Syafruddinllyas²*, Rr. Suzy Indharty³

¹Departemenof T.H.T.K.L. - FK USU/RSUP H. Adam Malik Medan, Indonesia ²Departmenof Biology/Biomolecular- FMIPA USU, Indonesia ³Departmenof Neurosurgery- FK USU/RSUP H. Adam Malik Medan, Indonesia

Abstract:This study evaluated the activity of HSP70 gene in serum and tissues of the cochlea as a result of noise and heat in rats (Rattusnorvegicus). The study was purely experimental studies in vivo with the design following the research design Completely Randomized Design (CRD) using a completely randomized design (CRD). Samples used 30 male rats Rattusnorvegicusstrain. The treatment group comprised 3 groups. Each group consisted of 10 rats. P0 group (control) = do not provide treatment noisy and hot. P1 = treatment noisy groups of 80-110 dB, and the group P2 = heat treatment 27-40°C. The results showed that there was significant effect giving sound and heat (p <0.05) against HSP70 gene expression both in serum and in cochlear tissue.

Keywords: Noise, rats, serum HSP70, Cochlear.

SyafruddinIlyas *et al*/International Journal of PharmTech Research, 2016,9(11): 58-63.
