Abstract

Nowadays, AFB_1 is one of the most bio-hazardous toxins particularly in agricultural products everywhere. In order to investigate the impact of AFB_1 on human immune system, an experiment was conduct on human PBMCs in vitro.

Whole bloods from 2o volunteers were obtained and mixed. Using ficoll gradient procedure pure PBMCs were isolated and suitably seeded in 24 wells culture plate. PBMCs were exposed with different doses of AFB_1 (0 as control, 10 and 100 ng/ml). Real time quantitative (q)PCR assay was conducted using specific primers *NF-kB* and *Beta-actin* (as internal control). The results show AFB_1 significantly increased in both 10 and 100 ng/ml, but *NF-kB* up-regulation in 100 ng/ml were also statistically significant, compared to those in 10 ng/ml. Immunosuppressive effects of AFB_1 show the importance of choosing strategist to reduce and prevent AFB_1 toxicity.

Keywords: AFB_1, *NF-kB*, Real time qPCR, PBMCs, upregulation

University of Zabol
Faculty of Science

Department of Biology

Titel:
The effect of Aflatoxin B1 in nuclear factor kappa b, *NF-kb* in human peripheral mononuclear cells in vitro condition.

Supervisor:

Dr. A. Rashky

Dr. J. Mehrzad

Advisor:

Dr.A..A.Bahari
Dr. S. Esmaeilzadeh Bahabadi

By:
E. Imani

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