

FUTURE RECCOMENDATIONS

Further research can be carried to study 3D structure of the hetero-dimeric ADI of *E. faecium* GR7. Study may be extended to explore novel heterologous hosts for co-current expression of *arcA2* and *arcA* genes encoding two subunits of ADI. Such a study may prove beneficial to further increase production yields and decrease downstream processing for recovery of pure ADI. In the current study, author has studied cytotoxicity of *E. faecium* GR7 ADI against three arginine auxotrophic cancer cell lines only. Similar in vitro cytotoxicity studies can also be performed on the recombinant ADI of *E. faecium* GR7 against various cancer cell lines and its potential as an anti-cancer agent can be tested. After testing in vitro efficacy of the recombinant ADI, in vivo studies may be performed to study drug efficacy in the treatment of various forms of cancers in mice models, serum half life span, clinical dosage and potential side effects etc.