

## عنوان مقاله:

Comparison of Human Factor IX Abundance and mRNA Expression Levels In Stable Insect and Mammalian Cells

## محل انتشار:

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## خلاصه مقاله:

In the production of recombinant proteins, the selection of an expression system is very important. Although CHO cells are used as mammalian expression system, the ability of insect Schneider line 2 (S2) cells as a new expression system for the high production of many human proteins were confirmed. It is suggested that high copy number of an introduced gene and so high transcription in these cells can be regarded as one of the reasons for high expression of recombinant proteins. Therefore, the present study aimed to evaluate the correlation of recombinant human coagulation factor IX (hFIX) abundance and mRNA expression. The amount of hFIX mRNA by quantitative real-time PCR as well as hFIX protein in cell lysate and cultured media by Elisa was analyzed. The results of data analysis indicated 6 fold increases in mRNA level in S2 cells in comparison to CHO cells. Furthermore, S2 cell line indicated 5.5 and 7-fold increase in total and secreted protein level, respectively, compared to CHO cell line. The data demonstrated the correlation of mRNA and protein abundance and indicate that S2 cell lines are superior in producing the recombinant proteins.

## کلمات کلیدی:

Drosophila S2 cells, CHO cells, Coagulation factor IX, Real-time PCR, Elisa

## لینک ثابت مقاله در پایگاه سیویلیکا:

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