

عنوان مقاله:

Aqueous Stability of Leuprolide Acetate: Effect of Temperature, Dissolved Oxygen, pH and Complexation with β-Cyclodextrin

محل انتشار:

يازدهمين سميناًر بين المللي علوم و تكنولوژي يليمر (سال: 1393)

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خلاصه مقاله:

In the present research, the aqueous stability of leuprolide acetate (LA) in phosphate buffered saline (PBS) medium was studied. For this purpose, the effect of temperature, dissolved oxygen and pH on the stability of LA during 35 days was investigated. Results showed that the aqueous stability of LA was higher at low temperatures. Degassing of the PBS medium partially increased the stability of LA at 4 °C, while did not changed that at 37 °C. The degradation of LA was accelerated at lower pH values. In addition, complexes of LA with different portions of β-cyclodextrin (β-CD) were prepared through freeze-drying procedure. Studying their aqueous stability at various pH values showed LA/β-CD complexes exhibited higher stability in comparison to LA. The stability of complexes was also improved with increasing the portion of LA/β-CD up to 1/10

کلمات کلیدی: leuprolide acetate - aqueous stability - β-cyclodextrin – HPLC

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