Purification and refolding of human erythropoietin receptor produced in *Escherichia coli*

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Abstract

Erythropoieton receptor (EpoR) is a member of the cytokine receptor super- family and is expressed primarily on hematopoietic cells. EpoR plays an important role in regulating red blood cell production. Due to its low expression level in human tissue, studies on the biochemical and biophysical properties of EpoR have been limited. In the present study, an extracellular domain of recombinant human EpoR (rh-EpoR-ED) was expressed in *Escherichia coli* as inclusion bodies. Purification was achieved by immobilized metal affinity chromatography (IMAC) under denaturing condition and purified receptor was refolded by solid phase refolding method. We obtained sufficient quantities of rh-EpoR-ED, which can be available for biochemical and biophysical characterization through our production and purification method.

References

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