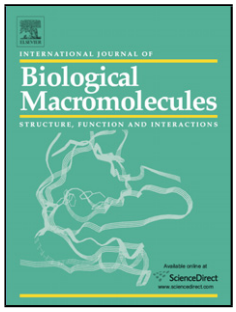

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Purification of recombinant human thyroid peroxidase (hTPO) from AD293 mammalian cells

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Highlights

- Untagged human thyroid peroxidase mature sequence was expressed in AD293 mammalian cells.
- *Gluc* (*Gaussia luciferase*) protein was incorporated for secretory expression.
- Augmentation of selected clone was done in serum free media for higher yield and ease of purification.
- This is the first report with respect to cost effective and simplified purification approach to get highest yield and purity of recombinant hTPO.

Abstract

Human thyroid peroxidase (hTPO) has been secretory expressed in AD293 mammalian cells. cDNA sequence of '*Gluc*' (*Gaussia luciferase*) protein from *Gaussia princeps* was incorporated at the amino terminal of hTPO gene for secretion of targeted protein outside the mammalian cells. Augmentation of TPO clone in serum free mediums was investigated and a simplified purification procedure of hTPO has been reported here. Purified hTPO was further analyzed by SDS-PAGE and