## **Materials and Methods**

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## Reagents, enzymes and radioisotopes

A *Pichia* expression kit version E (Invitrogen) with license were kindly gifted from Professor Schreiber, Australia. A PCR and plasmid purification kits were from Gibco BRL (USA). T4 DNA ligase, restriction endonucleases, and Taq DNA polymerase were from Promega. Oligonucelotide primers were synthesized by Gibco BRL or the Bioservice Unit, National Science and Technology Development Agency, Thailand.

L[125I]-thyroxine (1.2 Ci/mg) was obtained from NEN Dupont, SepPak C-18 cartridges from Millipore Waters, the Enhanced Chemiluminescence kit from Amersham, anti-rabbit Ig raised in sheep from Silenus, Melbourne, Australia, and X-ray film from Eastman-Kodak. A Superose-6 column from Pharmacia LKB Biotechnology (USA). Protein molecular weight markers were products of Pharmacia LKB Biotechnology (USA). All reagents were of analytical grades.

## Bacterial and yeast strains, and plasmid vectors

*E.coli* strain DH5α from Promega. *Pichia* SMD 1168 was purchased with license from Invitrogen. *Pichia* expression vectors pPIC 3.5 and pPIC 9 (Invitrogen) were kindly gifted from Professor Schreiber, Australia.