

Thyroglobulin Protein, Rat, Recombinant (His & SUMO)

General Information

Synonyms: Tg;Thyroglobulin

Protein Construction: 21-300 aa

Species: Rat

Expression Host: E. coli

Accession: P06882

Molecular Weight: 48.0 kDa (predicted)

AA Sequence:

NIFEYQVDAQPLRPCELQREKAFLKQDEYVPQCSSEDSFQTVQCQNDGQSCWCVDSGDGTEVPGSRQLGRPT
ACLSFCQLHKQRILLSSYINSTDALYLPQCQDSGNYAPVQCQLQQVCWCVDTEGMEVYGTRQQGRPTRCP
RSCEIRSRRLLHGVGDKSPPQCDADGEFMPVQCKFVNTTDMMIFDLIHNYNRFPDFAVTFSAFRNRFPEVSGY
CYCADSQGRELAETGLELLLDEIYDTIFAGLDQASTFTQSTMYRILQRRFLAIQLVISGRFRCPT

QC Testing

Biological Activity: Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 90% as determined by SDS-PAGE.

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Tris-based buffer, 50% glycerol

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Acts as a substrate for the production of iodinated thyroid hormones thyroxine (T4) and triiodothyronine (T3). The synthesis of T3 and T4 involves iodination of selected tyrosine residues of TG/thyroglobulin followed by their oxidative coupling. Following TG re-internalization and lysosomal-mediated proteolysis, T3 and T4 are released from the polypeptide backbone leading to their secretion into the bloodstream. One dimer produces 7 thyroid

hormone molecules.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481