TYRP1
Recombinant Human Tyrosinase-related protein 1 (His Tag)

Catalog No.	CRH705A-His CRH705B-His	**Quantity:**	20 µg 100 µg

Alternate Names: 5,6-dihydroxyindole-2-carboxylic acid oxidase, DHICA oxidase, Catalase B, Glycoprotein 75, Melanoma antigen gp75, Tyrosinase-related protein 1, TRP1

Description: Tyrosinase-related protein is a melanosomal enzyme that belongs to the tyrosinase family and plays an important role in the melanin biosynthetic pathway. Mutations in this enzyme are the cause of rufous oculocutaneous albinism and oculocutaneous albinism type III. TYRP1 is involved in the oxidation of 5,6-dihydroxyindole-2-carboxylic acid (DHICA) into indole-5,6-quinone-2-carboxylic acid. This enzyme may regulate or influence the type of melanin synthesized. The expression of Tyrosinase-related protein 1 (TYRP1) is regulated by the microphthalmia-associated transcription factor (MITF). There is mounting evidence demonstrating that in addition to its role in eumelanin synthesis, TYRP1 is involved in maintaining stability of tyrosinase proliferation and melanocyte cell death.

UniProt ID: P17643

Protein Construction: A DNA sequence encoding the human TYRP1 extracellular domain (Met 1- Arg 471) was fused with a polyhistidine tag at the C-terminus.

Source: Baculovirus-Insect Cells

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycine.
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The secreted rhTYRP1 consists of 458 aa with a predicted MW of 52 kDa and migrates at ~55 kDa in SDS-PAGE under reducing conditions.

Purity: > 96 % as determined by SDS-PAGE.

Endotoxin Level: < 1.0 EU per µg of the protein as determined by the LAL method

Biological Activity: Testing in progress

Predicted N-terminal: Gln 25

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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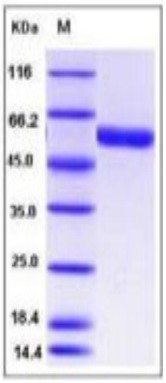
SDS-PAGE



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