





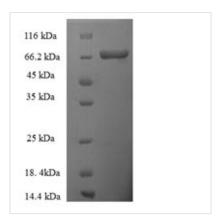
Recombinant Human Thyroid hormone receptor beta (THRB)

Product Code	CSB-EP023514HU
Relevance	Nuclear hormone receptor that can act as a repressor or activator of transcription. High affinity receptor for thyroid hormones, including triiodothyronine and thyroxine
Abbreviation	Recombinant Human THRB protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P10828
Alias	Nuclear receptor subfamily 1 group A member 2c-erbA-2c-erbA-beta
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MTPNSMTENGLTAWDKPKHCPDREHDWKLVGMSEACLHRKSHSERRSTLKN EQSSPHLIQTTWTSSIFHLDHDDVNDQSVSSAQTFQTEEKKCKGYIPSYLDKD ELCVVCGDKATGYHYRCITCEGCKGFFRRTIQKNLHPSYSCKYEGKCVIDKVT RNQCQECRFKKCIYVGMATDLVLDDSKRLAKRKLIEENREKRRREELQKSIGH KPEPTDEEWELIKTVTEAHVATNAQGSHWKQKRKFLPEDIGQAPIVNAPEGGK VDLEAFSHFTKIITPAITRVVDFAKKLPMFCELPCEDQIILLKGCCMEIMSLRAAV RYDPESETLTLNGEMAVTRGQLKNGGLGVVSDAIFDLGMSLSSFNLDDTEVAL LQAVLLMSSDRPGLACVERIEKYQDSFLLAFEHYINYRKHHVTHFWPKLLMKV TDLRMIGACHASRFLHMKVECPTELFPPLFLEVFED
Research Area	Cardiovascular
Source	E.coli
Target Names	THRB
Protein Names	Recommended name: Thyroid hormone receptor beta Alternative name(s): Nuclear receptor subfamily 1 group A member 2 c-erbA-2 c-erbA-beta
Expression Region	1-461aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	00 01 D
	68.8kDa
Protein Length	Full Length

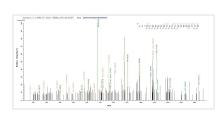
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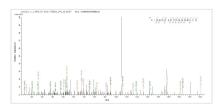




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP023514HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) THRB.



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Description

Amino acids 1-461 form the expressed segment for recombinant Human THRB. This THRB protein is theoretically predicted to have a molecular weight of 68.8 kDa. This protein is generated in a e.coli-based system. The THRB coding gene included the N-terminal 6xHis-SUMO tag, which simplifies the detection and purification processes of the recombinant THRB protein in following stages of expression and purification.

Thyroid hormone receptor beta (THRB) is a nuclear receptor protein that plays a crucial role in mediating the effects of thyroid hormones on gene expression and overall metabolism. As a member of the thyroid hormone receptor family, THRB functions as a transcription factor that binds to thyroid hormone response elements (TREs) in the promoter regions of target genes. Upon binding to triiodothyronine (T3), the biologically active form of thyroid hormone, THRB undergoes conformational changes that enable its interaction with co-regulatory proteins, leading to the regulation of gene transcription. THRB is primarily expressed in tissues such as the brain, liver, and heart, where it influences processes like growth, development, and energy homeostasis. Dysregulation of THRB is associated with thyroid hormone resistance syndromes and various metabolic disorders. In research, THRB is studied to elucidate its molecular mechanisms, understand its role in physiology, and explore its potential as a therapeutic target for thyroid-related and metabolic diseases.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



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concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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