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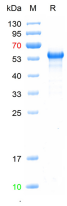
Recombinant mouse TSHR protein, His

Catalog Number:	bs-42044P
Concentration:	＞0.5 mg/ml
Species:	Mouse
AA Seq:	22-413/764
Predicted MW:	50
Tags:	His
Activity:	Not tested
Endotoxin:	Not analyzed
Purity:	> 90% as determined by SDS-PAGE
Purification:	AC
Form:	Lyophilized or Liquid
Storage:	20mM Tris-HCl (pH8.0). Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.
Background:	The glycoprotein hormone receptor family consists of the luteinizing hormone receptor, the follicle-stimulating hormone receptor, and the thyroid stimulating hormone(TSH) receptor. TSH, which is released from the pituitary gland, binds to the TSH receptor on thyroid cells to control size and function of the thyroid gland (De Felice et al. 2004). The TSH receptor signals through Gs to elevate intracellular cAMP in the thyroid gland, which regulates iodide uptake, and transcription of thyroglobulin (Tg), thyroid peroxidase (TPO), and sodium-iodide symporter. The TSH receptor also signals Gq and phospholipase C to regulat iodide efflux, H2O2 production, and thyroglobulin iodination. Autoimmunity to the TSH receptor causes hyperthyroidism (Graves disease) or hypothyroidism (Hashimoto thyroiditis) when the autoantibodies function as agonists or antagonists, respectively, at the TSH receptor (Rapoport and McLachlan, 2001; Davies et al., 2002). Millipore’ s cloned human TSH receptor-expressing cell line is made in the Chem-10 host, which supports high levels of recombinant TSH receptor expression on the cell surface and contains high levels of the promiscuous G protein to couple the receptor to the calcium signaling pathway. Thus, the cell line is an ideal tool for screening for antagonists of interactions between TSH and its ligands.

VALIDATION IMAGES



The purity of the protein is greater than 90% as determined by reducing SDS-PAGE.

PRODUCT SPECIFIC PUBLICATIONS

[IF=12.2] Shenhai Gong. et al. Intestinal deguelin drives resistance to acetaminophen-induced hepatotoxicity in female mice. GUT MICROBES. 2024 九月 21 ; . 39305468