



www.MedChemExpress.com

Inhibitors, Agonists, Screening Libraries

TSH Receptor

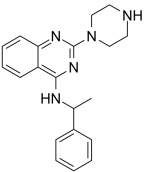
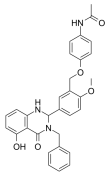
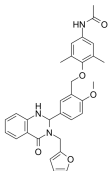
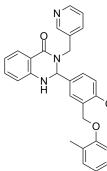
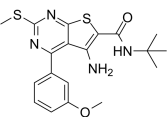
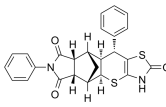
Thyrotropin receptor; Thyroid-stimulating hormone Receptor

The thyrotropin receptor (TSHR), one of the primary antigens in autoimmune thyroid disease, is a target of both antigen-specific T cells and antibodies in patients with this condition. Autoantibodies to the TSHR (TSHR-Ab) act as thyroid stimulating factor (TSH) agonists in autoimmune hyperthyroidism (Robert Graves disease) but as TSH antagonists in autoimmune hypothyroidism (Hashimoto thyroiditis). The TSHR antigen is primarily expressed in the epithelial cells of the thyroid follicles, but TSHR mRNA and protein have been reported in a variety of cell types, some of which show evidence of receptor activity.

TSH receptor (TSHR) plays an important role in the pathogenesis of thyroid disease, a TSHR antagonist could be a novel treatment.

TSH, acting through the TSH receptor, is the major stimulator of thyroid cell growth, differentiation and function.

TSH Receptor Inhibitors, Agonists, Antagonists & Modulators

<p>D3-βArr</p> <p>Cat. No.: HY-124867</p> <p>D3-βArr is a positive allosteric modulator for thyrotropin receptor (TSHR), which initiates translocation of β-Arr 1 by direct TSHR activation and potentiates TSH-mediated preosteoblast differentiation in vitro.</p> <p>Purity: 99.48% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg</p> 	<p>ML-109</p> <p>Cat. No.: HY-114116</p> <p>ML-109 is a potent and full thyroid stimulating hormone receptor (TSHR) agonist, with an EC₅₀ of 40 nM.</p> <p>Purity: 99.12% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p>ML224 (NCGC00242364; ANTAG3)</p> <p>Cat. No.: HY-12381</p> <p>ML224(NCGC00242364; ANTAG3) is a selective TSHR inverse agonist; inhibits TSH-stimulated cAMP production with an IC₅₀ = 2.3 μM.</p> <p>Purity: 98.72% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p>NCGC00229600</p> <p>Cat. No.: HY-18286</p> <p>NCGC00229600 is an allosteric inverse agonist of thyrotropin receptor (TSHR). NCGC00229600 inhibits both TSH and stimulating antibody activation of TSHRs endogenously expressed in Graves' disease.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg</p> 
<p>Org41841</p> <p>Cat. No.: HY-100271</p> <p>Org41841 is a partial agonist of both luteinizing hormone/chorionic gonadotropin receptor (LHCGR) and thyroid-stimulating hormone receptor (TSHR) with EC₅₀s of 0.2 and 7.7 μM, respectively.</p> <p>Purity: 99.46% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 	<p>TSHR antagonist S37a</p> <p>Cat. No.: HY-129995A</p> <p>TSHR antagonist S37a is a highly selective thyrotropin receptor (TSHR) antagonist, with potential for the treatment of Graves' orbitopathy.</p> <p>Purity: ≥99.0% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 
<p>TSHR antagonist S37b</p> <p>Cat. No.: HY-129995</p> <p>TSHR antagonist S37b is the less effective enantiomer of TSHR antagonist S37a (HY-129995A). TSHR antagonist S37b shows only a minor effect for thyrotropin receptor (TSHR) inhibition. TSHR antagonist S37b can be used for the research of thyroid function.</p> <p>Purity: 99.06% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 