



## ANOGEN - A Division of YES Biotech Laboratories Ltd.

2355 Derry Road East, Unit 23, Mississauga, ON, Canada L5S 1V6 • Tel: (905) 677-9221 • Fax: (905) 677-0023

### Mouse Anti-Human TSH Monoclonal Antibody Datasheet

**Product Name:** mAb anti-human TSH

**Clone No.:** TSH-1

**Catalogue No.:** MO-M40046B

**Quantity:** 0.5 mg/vial

**Description:** Mouse anti-Human Thyroid Stimulating Hormone (TSH) monoclonal antibody.

**Purification:** Protein G affinity purified

**Product Type:** Primary antibody-**capture** antibody in matched antibody pair

**Target Protein:** Human TSH

**Immunogen:** Recombinant human TSH

**Fusion Myeloma:** Not known

**Specificity** Human TSH  $\alpha$  subunit

**Species Reactivity:** Human, others not tested

**Host / Isotype:** Mouse, IgG1 Kappa

**Formulation:** Lyophilized from a solution in 0.01M PBS, pH 7.2

**Reconstitution:** Double distilled water is recommended to adjust the final concentration to 1.00mg/mL.

**Storage:** Store at -20°C

**Research Area:** Hormone, metabolism

**Background:** Thyroid stimulating hormone is secreted by pituitary gland in response to the stimulation of Thyrotropin Releasing Hormone (TRH) produced by hypothalamus. TSH binds to the TSH receptors on the surface of the follicular cells in thyroid and stimulates the

production of thyroid hormones (T4 and T3). TSH, T3 and T4 play an important role in normal growth, brain development in young children, and regulate the metabolism in adults. TSH secretion is increased when T3 and T4 are insufficient. Elevated TSH, but low T3 and T4 levels indicate that thyroid cannot produce thyroid hormones at a normal rate and the condition is called hypothyroidism. If T3 and T4 levels are high when TSH is at a low level, it indicates that thyroid is producing abnormally large amount thyroid hormones, and the condition is called hyperthyroidism which is manifested by hypermetabolic symptoms.

TSH has an  $\alpha$  subunit that is identical to the one in other glycoprotein hormones such as LH, FSH and HCG.

**Applications:** **ELISA:** This antibody can be used as capture antibody in sandwich ELISA for human TSH detection in combination with HRP conjugated TSH $\beta$  antibody [Cat No: MO-M40046T] that is derived from anti-TSH clone TSH2 [Cat No: MO-M40046A]. The suggested coating concentration is 4 $\mu$ g/mL.

**References:** If research is published using this product, please inform Anogen in order to cite the reference on this datasheet. Anogen will provide one unit of product in the same category as gratitude.

This product is for **LABORATORY RESEARCH USE** and further manufacture **ONLY**, and cannot be administrated to human and animals for use in diagnostic and therapeutic procedures.

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