

Rev04
Update: Oct,19,2022**DATASHEET**

TSH Antibody (1H4G9), mAb, Mouse

Cat. No.: A01709

Overview

Specificity	GenScript TSH Antibody (1H4G9), mAb, Mouse detects endogenous levels of human TSH and does not cross-react with human HCG.
Host Species	Mouse
Immunogen	purified TSH from human pituitary
Species Reactivity	Human. Reactivity to other species is not tested yet.
Conjugate	Unconjugated

Applications

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Application	Recommended Usage
Sandwich ELISA	Capture: 0.5-10 µg/ml Detection: 0.05-0.2 µg/ml

Recommended antibody pairing for sandwich immunoassay:

These antibodies are perfect choice for in vitro diagnostic assay development. And they are prepared for non-clinical research use only. The recommended pairs are based on our laboratory results.

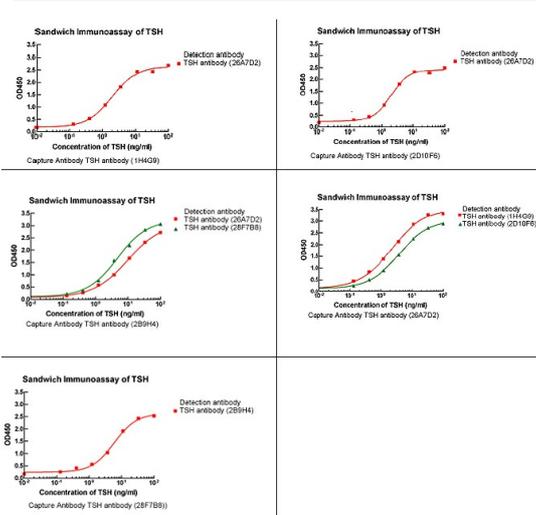
Detection	Capture					
	A01709 (1H4G9)	A01710 (2D10F6)	A01711 (2B9H4)	A01712 (26A7D2)	A01713 (28F7B8)	A01714 (3B12D11)
A01709 (1H4G9)		-	-	+++	-	-
A01710 (2D10F6)	-		-	++	-	-
A01711 (2B9H4)	-	-		-	+	-
A01712 (26A7D2)	+	+	+		-	++
A01713 (28F7B8)	-	-	+++	-		-
A01714 (3B12D11)	-	-	-	-	-	

The above data was achieved by Sandwich ELISA. ‘+’ means reaction and ‘-’ means no reaction. The number of ‘+’ represents reaction intensity.

Properties

Form	Lyophilized
Storage Buffer	lyophilized with PBS, pH 7.4, containing 0.02% sodium azide. Products of 1mg and 5mg size are provided in liquid form.
Reconstitution	Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/mL.
Storage Instructions	The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.
Purification	Protein A affinity column
Isotype	Mouse IgG1, κ
Clonality	Monoclonal
Clone ID	1H4G9

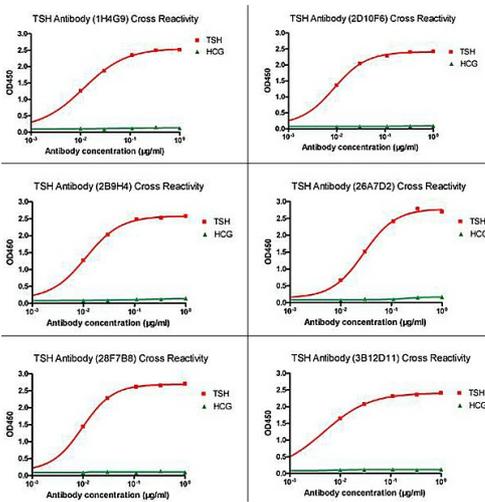
Examples



Antibody pairs analysis of TSH monoclonal antibodies by Sandwich ELISA:

General conditions:

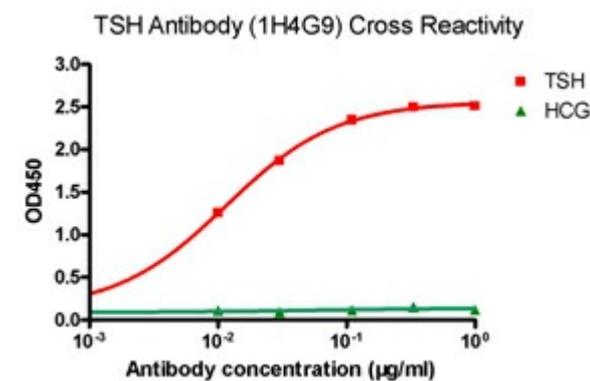
1. Microplate was incubated with a capture antibody against TSH, followed by 3 washing cycles.
2. Incubation with TSH followed by 3 washing cycles.
3. Incubation with peroxidase conjugated detection antibody against TSH, followed by 3 washing cycles.
4. Colorimetric determination of bound peroxidase activity.



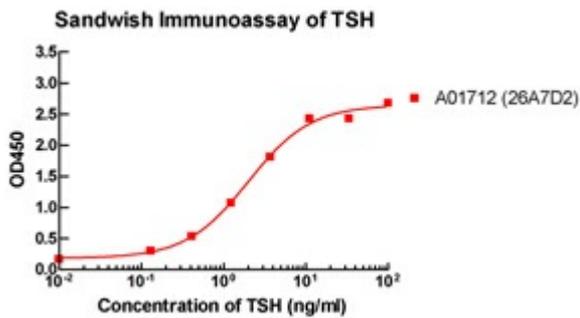
Cross-reactivity of TSH monoclonal antibodies by Indirect ELISA:

General conditions:

1. Microplate was incubated with human TSH, or human HCG respectively, followed by 3 washing cycles.
2. Incubation with mouse anti-TSH antibody followed by 3 washing cycles.
3. Incubation with goat anti-mouse IgG conjugated to peroxidase, followed by 3 washing cycles.
4. Colorimetric determination of bound peroxidase activity.



ELISA analysis of Cross Reactivity using TSH Antibody (1H4G9), mAb, Mouse (GenScript, A01709)



Sandwich ELISA analysis of matched antibody pairs using TSH Antibody, mAb, Mouse

1. ELISA plate is coated with TSH Antibody, mAb, Mouse (Cat. No. A01709 (1H4G9))
2. Human TSH at appropriate dilution is added into appropriate reaction wells.
3. After a period of incubation, HRP conjugated TSH Antibody, mAb, Mouse (Clone.26A7D2) is added followed by proper period of incubation.
4. TMB substrate is added and developed at room temperature.
5. Stop the reaction with 1.0 N HCl and read the plate at 450nm.

Background

Target Background : Thyrotropin-stimulating hormone (TSH) is a noncovalently linked glycoprotein heterodimer and is part of a family of pituitary hormones containing a common alpha subunit and a unique beta subunit that confers specificity. Free alpha and beta subunits have essentially no biological activity. TSH (Thyroid stimulating hormone) is secreted from cells in the anterior pituitary and it is indispensable for the control of thyroid structure and metabolism. Free alpha and beta subunits have essentially no biological activity. GenScript TSH Antibody (1H4G9), mAb, Mouse is produced from the hybridoma resulting from fusion of Sp2/0 myeloma and lymphocytes obtained from mouse immunized with purified TSH from human pituitary.

Synonyms : FSHA antibody;

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.