

TSH (Thyroid Stimulating Hormone) (EP254)


Rabbit anti-human TSH (Thyroid Stimulating Hormone) Monoclonal Antibody (Clone EP254)

REFERENCES AND PRESENTATIONS¹

- **ready-to-use** (manual or LabVision AutoStainer)
MAD-000693QD-3
MAD-000693QD-7
MAD-000693QD-12
- **Ready-to-use (MD-Stainer)²**
MAD-000693QD-3/V
MAD-000693QD/V
- **concentrated**
MAD-000693Q - 1:50 recommended dilution

COMPOSITION

Anti-human TSH (Thyroid Stimulating Hormone) rabbit monoclonal antibody purified from serum and prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

INTENDED USE : Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

CLONE: EP254³

Ig ISOTYPE: IgG

IMMUNOGEN: A synthetic peptide corresponding to residues of human TSH (subunit beta) protein

SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS:

TSH is a member of the glycoprotein hormone family, constituting a subset of the cystine-knot growth factor superfamily. TSH is produced by the pituitary thyrotrophs and released into circulation in a pulsatile manner. It stimulates thyroid functions using a specific membrane TSH receptor (TSHR) that belongs to the superfamily of G protein-coupled receptors (GPCRs). TSH beta is the beta subunit of thyroid stimulating hormone.



This TSH antibody labels normal and neoplastic thyrotropic cells. It may be useful in classification of pituitary tumors.

IHC POSITIVE CONTROL: Pituitary for normal tissue and pituitary adenoma for abnormal tissue.

VISUALIZATION: Cytoplasmic

IHC RECOMMENDED PROCEDURE:

- 4µm thick section should be taken on charged slides; dry overnight at 60°C
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) – boil tissue in the Pt Module using Vitro S.A EDTA buffer pH8⁴ for 20 min at 95°C. Upon completion rinse with 3-5 changes of distilled or deionised water followed by cooling at RT for 20 min
- Endogenous peroxidase block - Blocking for 10 minutes at room temperature using peroxidase solution (ref. MAD-021540Q-125)
- Primary antibody: incubate for 10 minutes [The antibody dilution (when concentrated) and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory]
- For detection use Master Polymer Plus Detection System (HRP) (DAB included; ref. MAD-000237QK)
- Counterstaining with haematoxylin and final mounting of the slide

STORAGE AND STABILITY:  Stored at 2-8°C. Do not freeze.  Once the packaging has been opened it can be stored until the expiration date of the reagent indicated on the label. If the reagent has been stored under other conditions to those indicated in this document, the user must first check its correct performance taking into account the product warranty is no longer valid.

WARNINGS AND PRECAUTIONS:

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.
3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.

¹ These references are for presentation in vials of Low Density Polyethylene (LDPE) dropper. In case the products are used in automated stainers, a special reference is assigned as follows:

- / L: Cylindrical screw-cap vials (QD-3 / L, QD-7 / L, QD-12 / L).

- / N: Polygonal screw-cap vials (QD-3 / N, QD-7 / N, QD-12 / N).

For different presentations (references / volumes) please contact the supplier.

² For Technical specifications for MD-Stainer, please contact your distributor.

³ TSH clone EP254 is manufactured using Epitomics's RabMAb® technology under U.S. Patent Nos. 5,675,063 and 7,402,409

⁴ Ref: MAD-004072R/D



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1/2

SAFETY RECOMMENDATIONS:










This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at www.vitro.bio or can be requested at regulatory@vitro.bio.

BIBLIOGRAPHY:

1. Szkudlinski MW, Fremont V, Ronin C, Weintraub BD. Thyroid-stimulating hormone and thyroid-stimulating hormone receptor structure-function relationships. *Physiol Rev.* 2002 Apr;82(2):473-502
2. Schaefer JS, Klein JR. A novel thyroid stimulating hormone beta-subunit isoform in human pituitary, peripheral blood leukocytes, and thyroid. *Gen Comp Endocrinol.* 2009 Jul;162(3):241-4. doi: 10.1016/j.ygcen.2009.04.006. Epub 2009 Apr 11. Erratum in: *Gen Comp Endocrinol.* 2009 Nov-Dec;164(2-3):130.
3. Cravioto H, Fukaya T, Zimmerman EA, Kleinberg DL, Flamm ES. Immunohistochemical and electron-microscopic studies of functional and non-functional pituitary adenomas including one TSH secreting tumor in a thyrotoxic patient. *Acta Neuropathol.* 1981;53(4):281-92

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
	Temperature limit
	Manufacturer
	Sufficient content for <n> assays
	Catalog number
	Lot code
	Refer to the instructions of use
	Medical product for <i>in vitro</i> diagnosis.
	Material safety data sheet

