

Datasheet



Mouse mAb to **Thyroglobulin**
Clone **EBS-O-170**
Isotype **IgG1-κ**

Source

A BALB/c mouse was immunized with human thyroglobulin.
Fusion partner: Sp2/0.

Specifications

EBS-O-170 reacts with thyroglobulin, a 660 kDa dimeric pre-protein with multiple glycosylation sites. It is produced by and processed within the thyroid gland to produce the hormone thyroxine and triiodothyronine. The vast majority of follicular carcinomas of the thyroid are positive for thyroglobulin even though sometimes only focally. Poorly differentiated thyroid carcinomas are frequently thyroglobulin negative. Adenocarcinomas of other-than-thyroid origin do not react with this antibody. EBS-O-170 has a high affinity for thyroglobulin ($K_a = 8.6 \times 10^{-9}$).

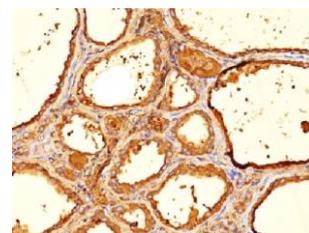


Figure 1: Human thyroid stained with EBS-O-170 (paraffin)

Species reactivity

Positive: human.

Applications

EBS-O-170 is useful in identification of thyroid carcinoma of the papillary and follicular types. Presence of thyroglobulin in metastatic lesions establishes the thyroid origin of tumor. Anti-thyroglobulin, combined with anti-calcitonin, can identify medullary carcinomas of the thyroid. Furthermore, anti-thyroglobulin, combined with anti-TTF1, can be a reliable marker to differentiate between primary thyroid and lung neoplasms.

ELISA	Flow cytometry	Frozen sections	Immunofluorescence	Paraffin sections	Western blot
+	+	+	+	Citrate	+

Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02 % sodium azide.

Stored at 4°C- 8°C, shelf life is at least 24 months after purchase.

Dilution advice

- ELISA (solid phase: 0,1-100 µg/ml; tracer: 0,001-100 µg/ml for 30 min at RT).
- Flow cytometry (0,5-1,0 µg/million cells in 0,1 ml).
- Immunoblotting (0,5-1,0 µg/ml).
- Immunofluorescence (0,5-1,0 µg/ml).
- Immunohistology (formalin-fixed: 1-2 µg/ml for 30 min at RT; staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6,0, for 10-20 min followed by cooling at RT for 20 minutes).

Positive control

Human thyroid.

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References

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- Ossendorp F.A. et al, *Moll. Cell. Endocrinol* **66**: 199-205 (1989).
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- Judkins AR et al, *Hum Pathol.***30(11)**: 1373-6 (1999).
- Heffess CS et al, *Cancer* **95(9)**: 1869-78 (2002).