

IVD DATA SHEET

SOX10

Concentrated Rabbit Monoclonal Antibody

Intended Use:

For in Vitro Diagnostic Use

Epitomics' Rabbit Monoclonal Anti-Human SOX10, Clone EP268, is intended for use to qualitatively identify SOX10 by light microscopy in sections of formalin-fixed, paraffin-embedded tissue using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. Evaluation must be performed by a qualified pathologist.

Catalog number	Description	Dilution
AC-0237A	0.1 ml, concentrated	1:100-1:200
AC-0237B	0.5 ml, concentrated	1:100-1:200
AC-0237	1 ml, concentrated	1:100-1:200
AC-0237BULK	2 ml or more, concentrated	1:100-1:200

Immunogen:	A recombinant fragment corresponding to residues in human SOX10 protein
Source:	Rabbit Monoclonal Antibody
Clone ID:	EP268
Isotype:	Rabbit IgG
Application:	Immunohistochemistry for formalin-fixed paraffin-embedded tissue

Summary and Explanation:

SOX10 is a member of the SOX (SRY-related HMG-box) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. During development, SOX10 first appears in the forming neural crest and continues to be expressed in Schwann cells. It is important for differentiation, maturation and maintenance of Schwann cells and melanocytes.

In normal tissues, SOX10 is expressed in Schwann cells and glial cells in the nervous system. It is also detected in melanocytes and epithelial cells of salivary gland and mammary gland. In tumor tissues, SOX10 labels melanoma and the tumor of neural crest origin. A recent study reported the expression of SOX10 in basal-like, unclassified triple-negative breast carcinoma. Thus, breast carcinoma must be considered in the differential diagnosis of melanoma for a SOX10-positive metastatic malignant neoplasm.

Reagent Provided:

Antibody to SOX10 is affinity purified and diluted in 10 mM Phosphate buffered saline (PBS), pH 7.2 containing 1% bovine serum albumin (BSA) and 0.09% sodium azide (NaN₃).

Storage and Stability:

Store at 2-8 °C. Do not use after expiration date indicated on vial. End user must validate any storage conditions other than those specified.

Procedures Recommended:

- 1. Pretreatment:** Epitope retrieval using citrate buffer (catalog #: SP-0001) with a pressure cooker.
- 2. Endogenous peroxidase block:** Block for 10 minutes at room temperature using peroxidase solution (catalog #: SP-0002).
- 3. Protein block:** Block for 10 minutes at room temperature using blocking solution (catalog #: SP-0003).
- 4. Primary antibody:** Incubate for 30 minutes.
- 5. Detection:** Follow instructions from the selected detection system (EpiPrecision™, a Biotin Streptavidin-HRP Detection, catalog #: DK-0001, 0003, or EpiVision™, a Rabbit Polymer Detection, catalog # DK-0002, 0004).

The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory.

Performance Characteristics:

This antibody gives nuclear staining in positive cells. The recommended positive controls are brain for normal tissue and melanoma for abnormal tissue.

Limitations:

Immunohistochemistry is a complex process. Variation in tissue selection, tissue processing, antigen retrieval, peroxidase activity, detection systems and improper counterstaining may cause variation in results.

References:

1. Kuhlbrodt K, *et al.*: *J Neurosci* 1998, 18:237-250
2. Karamchandani JR, *et al.*: *Appl Immunohistochem Mol Morphol* 2012, 20:445-450
3. Mohamed A, *et al.*: *Appl Immunohistochem Mol Morphol* 2012,
4. Nonaka D, *et al.*: *Am J Surg Pathol* 2008, 32:1291-1298
5. Cimino-Mathews A, *et al.*: *Hum Pathol* 2013, 44:959-965
6. Ivanov SV, *et al.*: *Br J Cancer* 2013, 109:444-451

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