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RUO DATA SHEET

SDHB

Concentrated Rabbit Monoclonal Antibody

Intended Use:
For Research Use Only (RUO)

Epitomics' Rabbit Monoclonal Anti-Human SDHB, Clone EP288, is intended for use to qualitatively identify SDHB by light microscopy in sections of formalin-fixed, paraffin-embedded tissue using immunohistochemical detection methodology.

Catalog number	Description	Dilution
AC-0256RUO	0.1 ml, concentrated	1:20
AC-0256RUOB	0.5 ml, concentrated	1:20
AC-0256RUOC	1 ml, concentrated	1:20
AC-0256RUOBULK	2 ml or more, concentrated	1:20

Immunogen: A recombinant protein corresponding to human SDHB protein.
Source: Rabbit Monoclonal Antibody
Clone ID: EP288
Isotype: Rabbit IgG
Application: Immunohistochemistry for formalin-fixed paraffin-embedded tissue

Summary and Explanation:
Succinate dehydrogenase (SDH) is Complex II in the mitochondria, vital for mitochondrial electron transport, as well as Krebs cycle function. SDH catalyzes the oxidation of succinate to fumarate and transfers electrons to ubiquinone through the coordination of its four subunits (SDHA, SDHB, SDHC, and SDHD). The SDH complex functions as a tumor suppressor. Loss of any subunit proteins lead to destabilization of the complex and tumor formation.

SDH subunit B (SDHB) is ubiquitously expressed in normal tissues. Germline mutations in SDHB, SDHC, or SDHD genes predisposes development of phaeochromocytoma, paraganglioma and gastrointestinal stromal tumor (GIST). SDHB immunohistochemistry is helpful in identification of phaeochromocytomas, paragangliomas or GIST with SDHB mutation.

Reagent Provided:
Antibody to SDHB 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 (NaN_3).

Storage and Stability:
Store at 2-8 °C. Do not use after expiration date provided on the vial. The users must validate any storage conditions other than those specified.

Procedures Recommended:
1. Pretreatment: Epitope retrieval using EDTA buffer (catalog #: SP-0004) with a pressure cooker.
2. Endogenous peroxidase block: Blocking for 10 minutes at room temperature using peroxidase solution (catalog #: SP-0002).
3. Protein block: Blocking 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 Streptavitin-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 cytoplasm staining in positive cells. The recommended positive controls are colon for normal tissue and colon cancer 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:
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