EPITOMICS
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IVD DATA SHEET

ARID1A (BAF250a)

Concentrated Rabbit Monoclonal Antibody

Intended Use:
For in Vitro Diagnostic Use

Epitomics' Rabbit Monoclonal Anti-Human ARID1A (BAF250a), Clone EP303, is intended for use to qualitatively identify ARID1A (BAF250a) 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-0275A	0.1 ml, concentrated	1:100-1:200
AC-0275B	0.5 ml, concentrated	1:100-1:200
AC-0275	1 ml, concentrated	1:100-1:200
AC-0275BULK	2 ml or more, concentrated	1:100-1:200

Immunogen: A synthetic peptide corresponding to residues of human ARID1A (BAF250a) protein
Source: Rabbit Monoclonal Antibody
Clone ID: EP303
Isotype: Rabbit IgG
Application: Immunohistochemistry for formalin-fixed paraffin-embedded tissue

Summary and Explanation:
ARID1A (AT-rich interactive domain-containing protein 1A), also known as BAF250a, is a recently identified tumor suppressor that is a component of the SWI/SNF chromatin remodeling complex. ARID1A functions by binding AT-rich DNA sequences to regulate gene expression of nucleosome mobilization and chromatin processes. While ARID1A is typically expressed in most normal tissues, it is frequently mutated in a multitude of tumors, including breast, lung, gastric, renal and ovarian cancers.

Genomic sequencing revealed that most ARID1A mutations are truncating mutations, and the presence of mutations is highly correlative with loss of ARID1A protein expression by immunohistochemistry. Deficient ARID1A expression was observed in approximately 70% of renal cell carcinomas, 50% of gastric cancers, 40% of clear cell ovarian carcinomas, and 40% of endometrioid carcinomas. Furthermore, loss of ARID1A expression was determined as an independent marker for poor prognosis; tumors were correlated with higher stage and grade, are more likely to be chemoresistant, and associated with shorter progression-free and overall survival rates. ARID1A antibody may be used for identifying ARID1A defect tumors.

Reagent Provided:
Antibody to ARID1A (BAF250a) 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. Don't use after expiration date provided on the vial. End user must validate any storage conditions other than those specified.

Procedures Recommended:
1. Pretreatment: Epitope retrieval using Tris/EDTA buffer (catalog #: SP-0004) 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 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 nuclear staining in positive cells. The recommended positive controls is colon for normal 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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2. Katagiri A, et al.: Mod Pathol 2012, 25(2):282-8.
3. Lowery WJ, et al.: Int J Gynecol Cancer 2012, 22(1):9-14.
4. Lichner Z, et al.: Am J Pathol 2013, 182(4):1163-70.
5. Mao TL, et al.: Am J Surg Pathol 2013, 37(9):1342-8.
6. Wang DD, et al.: PLoS One 2012;7(7):e40364.
7. Wiegand KC, et al.: N Engl J Med 2010, 363(16):1532-43.
8. Yamamoto S, et al.: Mod Pathol 2012, 25(4):615-24.

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