CE IVD

Mouse anti-KSP Caherin

Cat. No.: AIB-30122 (1 ml Concentrate); AIB-30121 (0.5 ml Concentrate); AIB-30120 (6 ml Ready-to-use)

Instructions for use

Intended use

This antibody is designed for the specific localisation of Ksp-Cadherin in formalin-fixed, paraffin-embedded tissue sections. Anti-Ksp-Cadherin antibody is intended for in vitro diagnostic use.

Specifications

Specificity:	Kidney-specific Cadherin (Ksp-Cadherin, Cadherin 16)
Clone:	ZSCA1
Isotype:	Mouse IgG1a
Species reactivity:	Human +, others not tested

Summary and Description

Within the adult kidney Kidney-specific Cadherin (Ksp-Cadherin or Cadherin 16) is found exclusively in the epithelial cells of distal tubules and collecting ducts.
Clear cell and papillary renal cell carcinoma (RCC) are thought to be of proximal tubular origin. Markers like RCC and CD10 have been shown to be useful for detection of these neoplasms. In contrast chromophobe RCC and oncocytoma are derived from distal tubules and can be stained specifically with Ksp-Cadherin.
Shen et al. describe Ksp-Cadherin as a sensitive marker for the distal portion of the nephron and deduced tumours (chromophobe RCC and oncocytoma). They suggest a combination of Ksp-Cadherin and “RCC” to cover both proximal and distal line of differentiation and thus improve the diagnosis of both primary and metastatic renal tumours.

Reagent provided

Mouse monoclonal antibody in buffer with carrier protein and preservative for stabilisation in the following formats:

Concentrate:	1 ml	(Cat. No. AIB-30122)
Concentrate:	0.5 ml	(Cat. No. AIB-30121)
Ready-to-use:	6 ml	(Cat. No. AIB-30120)

Dilution of primary antibody

Dilution of Nordic Biosite’ concentrated antibody depends on the detection system used. The final working dilution must always be determined by the user. The elaboration of staining protocol should be done by an experienced specialist. For Nordic Biosite’ recommendations see chapter ‘Staining procedure’.

Storage and handling

The antibody should be stored at 2-8°C without furt her dilution.
Dilutions of the concentrated antibody should be done in a suitable antibody dilution buffer (e.g. BCB-20005/BCB-20006 from Nordic Biosite). The diluted antibody should be stored at 2-8°C after use. Stability of this working solution depends on various parameters and has to be confirmed by appropriate controls. The antibody provided is suitable for use until the expiry date indicated on the label, if stored at 2-8°C. Do not use product after the expiry date.
Positive and negative controls should be run simultaneously with all specimens. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the antibody is suspected, contact Nordic Biosite’ technical support or your local distributor.

Explanations of the symbols on the product label:

REF	Catalog Number Bestellnummer Reference du catalogue	LOT	Batch Code Chargenbezeichnung Code du lot	Manufacturer Nordic BioSite AB Propellervägen 4A S-183 62 Täby Sweden Tel: +46 (0)8 5444 33 40 Fax: +46 (0)8 756 94 90 info@nordicbiosite.com www.nordicbiosite.com
	Use By Verwendbar bis Utiliser jusque	IVD	In Vitro Diagnostic Medical Device In vitro Diagnostikum Dispositif médical de diagnostic in vitro	
	Consult Instructions for use Gebrauchsanweisung beachten Consulter les instructions d'utilisation		Temperature Limitation Lagerungstemperatur Limites de température	

Precautions
Use through qualified personnel only.
Wear protective clothing to avoid contact of reagents and specimens with eye, skin and mucous membranes. If reagents or specimens come in contact with sensitive area, wash with large amounts of water.
Microbial contamination of the reagent must be avoided, since otherwise non-specific staining may occur.
Sodium azide (NaN3), used for stabilisation, is not considered hazardous material in the concentration used. Reaction of sodium azide with lead or copper in drainage pipes can result in the formation of highly explosive metallic azides. Sodium azide should be discarded in a large volume of running water to avoid formation of deposits. Material safety data sheets (MSDS) are available upon request.

Staining procedure
Refer to the following table for conditions specifically recommended for this antibody. Also refer to detection system data sheets for guidance on specific staining protocols or other requirements.

Parameters	Nordic BioSites recommendations
*Pre-treatment	Heat Induced Epitope Retrieval (for example in Citrate Buffer pH 6.0 (BCB-20015/-20016)
*Control tissue	Kidney or chromophobe renal cell carcinom
*Working dilution	1:100-1:200 (for concentrates)
*Incubation time	30-60 minutes

Quality control
The recommended positive control tissues for this antibody are normal kidney tissue or a chromophobe renal cell carcinoma. We recommend carrying out a positive and a negative control with every staining run. Please refer to the instructions of the detection system for guidance on general quality control procedures.

Troubleshooting
If you observe unusual staining or other deviations from the expected results please read these instructions carefully, refer to the instructions of the detection system for relevant information or contact your local distributor.

Expected results
This antibody stains positive in the cytoplasm and the cytoplasmic membrane of epithelial kidney cells and derived tumours in formalin-fixed, paraffin-embedded tissue sections. Further details about the expression pattern of Ksp-Cadherin can be found in the chapter ‘Summary and Description’. Interpretation of the staining results is solely the responsibility of the user. Any experimental result should be confirmed by a medically established diagnostic procedure.

Limitations of the Procedure
Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining, for example variations in fixation and embedding or the inherent nature of the tissue can cause inconsistent results (Nadji and Morales, 1983). Endogenous peroxidase, alkaline phosphatase or biotin may cause non-specific staining depending on the detection system used. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive results with HRP (horse radish peroxidase) detection systems (Omata et al, 1980). Inadequate counterstaining and mounting can influence the interpretation of the results.
Please note: Due to a high amount of endogenous biotin in kidney tissue a background staining can occur when using biotin/streptavidin detection systems. We recommend using a biotin-free polymer detection system (i.e. POLHRP-100 or POLAP-100).
Nordic Biosite warrants that the product will meet all requirements described from its shipping date until the expiry date is reached, if the product is stored and utilised as recommended. No additional guarantees can be given. Under no circumstances shall Nordic Bopsote be liable for any damages arising out of the use of the reagent provided.

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Performance characteristics

Nordic Biosite has conducted studies to evaluate the performance of the antibody for use with a standard detection system. The product has been found to be sensitive and specific to the antigen of interest with minimal or no cross-reactivity.

Bibliography

Mazal PR et al. (2005) Hum Pathol 36:22-28
Thomson RB et al (1995) J Biol Chem 270:17594-17601
Shen SS et al. (2005) Mod Pathol 18:933-940
Thedieck C et al (2005) Brit J Cancer 92:2010-2017
Nadji M and Morales AR (1983) Ann N.Y. Acad Sci 420:134-9
Omata M et al. (1980) Am J Clin Pathol 73(5): 626-32

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