CE IVD

Mouse anti-Cadherin 17 (CDH17)

Cat. No.: MSK105-05 (0.5 ml Concentrate); MSG105 (6 ml Ready-to-use)

Instructions for use

Intended use
This antibody is designed for the specific localisation of Cadherin 17 in formalin-fixed, paraffin-embedded tissue sections. Anti-Cadherin 17 antibody is intended for in vitro diagnostic use.

Specifications

Specificity:	Human Cadherin 17 (CDH17)
Clone:	1H3
Isotype:	Mouse IgG1 kappa
Species reactivity:	Human +, others not tested

Summary and Description
Cadherin 17, also called liver-intestinal Cadherin (LI-Cadherin) or CDH17, is a non classical member of the Cadherin superfamily. Cadherin 17 is involved in tumour invasion and metastasis and is expressed in the cytoplasmic membrane of intestinal epithelium. The antibody is a useful marker for the diagnosis of colorectal adenocarcinomas and pancreas. It has been shown that Cadherin 17 is a more sensitive marker than CDX2 in adenocarcinomas of the colon, esophagus and pancreas. Most CDX2 and CK20 negative medullary colon carcinomas are Cadherin 17 positive in immunohistochemistry. Panarelli *et. al.* showed a sensitivity of 100 % (161/161) for colon carcinomas using Cadherin 17, clone 1H3. The same sensitivity was reported by Tacha and Zhou (99/99). The clone 1H3 showed a sensitivity of 73 % for adenocarcinomas of the stomach whereas antibodies against CDX2 and Cytokeratin 20 showed a lower sensitivity of 16 and 28 % respectivly.

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

Concentrate:	0.5 ml	(Cat. No. MSK105-05)
Ready-to-use:	6 ml	(Cat. No. MSG105)

Dilution of primary antibody
Dilution of Zytomed Systems' 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 Zytomed Systems' recommendations see chapter 'Staining procedure'.

Storage and handling
The antibody should be stored at 2-8°C without further dilution. Dilutions of the concentrated antibody should be done with a suitable antibody dilution buffer (e.g. ZUC025 from Zytomed Systems). 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 Zytomed Systems' technical support or your local distributor.

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 (NaN_3), 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	Zytomed Systems recommendations
*Pre-treatment	Heat Induced Epitope Retrieval (for example in EDTA buffer pH 9.0 ZUC029)
*Control tissue	Colon carcinoma
*Working dilution	1:100-1:200 (for concentrates)
*Incubation time	60 minutes

Quality control
The recommended positive control tissue for this antibody is colon 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 cytoplasmic membrane of intestine epithelial cells in formalin-fixed, paraffin-embedded tissue sections. 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.
Zytomed Systems 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 Zytomed System be liable for any damages arising out of the use of the reagent provided.

Performance characteristics
Zytomed Systems 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 except the described side-reaction with hepatocytes (see chapter “Summary and Description”).

Bibliography

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Explanations of the symbols on the product label:

REF	Bestellnummer Catalog Number Reference du catalogue		Verwendbar bis Use By Utiliser jusque		Gebrauchsanweisung beachten Consult Instructions for use Consulter les instructions d'utilisation
LOT	Chargenbezeichnung Batch Code Code du lot		Lagerungstemperatur Temperature Limitation Limites de température	RUO	Nur für Forschungszwecke For Research Use Only Pour la recherche uniquement
IVD	In vitro Diagnostikum In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro		Achtung Warning Attention		Hersteller / Manufacturer / Fabricant Zytomed Systems GmbH • Anhaltinerstraße 16 14163 Berlin, Germany • Tel: (+49) 30-804 984 990 www.zytomed-systems.com