



# Mouse anti-CD79a

Cat. No.: MSK036 (1 ml Concentrate); MSK036-05 (0.5 ml Concentrate);

MSG036 (6 ml Ready-to-use)

## Instructions for use

#### Intended use

This antibody is designed for the specific localisation of CD79a in formalin-fixed, paraffin-embedded tissue sections. Anti-CD79a antibody is intended for in vitro diagnostic use.

**Specifications** 

Specificity: CD79a

Immunogen: Recombinant protein according to an extra cellular fraction of human CD79a

Clone: JCB117

**Isotype:** Mouse IgG1 kappa

**Species reactivity:** Human +, others not tested

#### **Summary and Description**

CD79 is composed of the glycoproteins CD79 $\alpha$  (40 – 45 kDa) and CD79 $\beta$  (37 kDa). Both components form the disulfid-linked heterodimer CD79 (82 – 95 kDa). The B-cell antigen receptor complex is formed via association of CD79a with membrane-bound immunoglobulins.

Expression of CD79a is largely restricted to B-cell lineage. However, CD79a is coexpressed with CD3. According to Pilozzi *et al.* CD79a positive T-lymphoblastic leukemias/lymphomas are also positive for CD3, whereas cases of B-lymphoblastic leukemias/lymphomas are CD3 negative and CD79a positive.

Initially, CD79a exists in precursor B-cells as cyCD79 in the cytoplasm. During the pro B-cell phase expression on the cell surface starts and remains during the whole differentiation. At the beginning of plasma cell differentiation CD79 expression is stopped. Eventually, only a small amount of plasma cells contain CD79a. CD79a is stronger expressed by B-cells of the follicular mantel zone than by cells in the germ centre.

Anti-CD79a antibody of clone JCB117 is helpful for identification of B-cell neoplasias of all stages of maturity.

## Reagent provided

Mouse monoclonal antibody from cell culture supernatant in PBS with carrier protein and preservative for stabilisation in the following formats:

Concentrate: 1 ml (Cat. No. MSK036)
Concentrate: 0.5 ml (Cat. No. MSK036-05)
Ready-to-use: 6 ml (Cat. No. MSG036)

## 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℃ without furt her 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<sub>3</sub>), 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.

<u>Parameters</u> <u>Zytomed Systems recommendations</u>

\*Pre-treatment Heat Induced Epitope Retrieval in Citrate Buffer pH 6.0 (ZUC028)

\*Control tissue Tonsils, lymph nodes

\*Working dilution 1:50-1:100 (for concentrates)

\*Incubation time 60 minutes

#### **Quality control**

The recommended positive control tissues for this antibody are tonsils and lymph nodes. 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 cell membrane and/or the cytoplasm of CD79a positive cells in formalin-fixed, paraffin-embedded tissue sections. Further details about the expression pattern of CD79a 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. 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.

# **Bibliography**

Mason DY et al. Blood 86:1453-1459, 1995 Pilozzi E et al. J Pathol 186:140-143, 1998 Nadji M and Morales AR Ann N.Y. Acad Sci 420:134-9, 1983 Omata M et al. Am J Clin Pathol 73(5): 626-32, 1980

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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	$\Box i$	Gebrauchsanweisung beachten Consult Instructions for use Consulter les instructions d'utilisation	
LOT	Chargenbezeichnung Batch Code Code du lot		Lagerungstemperatur Temperature Limitation Limites de température	Hersteller / Manufacturer / Fabricant Zytomed Systems GmbH		
IVD	In vitro Diagnostikum In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro	RUO	Nur für Forschungszwecke For Research Use Only Pour la recherche uniquement		Anhaltinerstraße 16 14163 Berlin, Germany Tel: (+49) 30-804 984 990 www.zytomed-systems.de	