



# Mouse anti-CD138 (Syndecan-1)

Cat. No.: AIB-30018 (1 ml Concentrate); AIB-30019 (0.5 ml Concentrate);

AIB-30017 (6 ml Ready-to-use)

# Instructions for use

#### Intended use

This antibody is designed for the specific localisation of Syndecan-1 (CD138) in formalin-fixed, paraffin-embedded tissue sections.

Anti-CD138 antibody is intended for in vitro diagnostic use.

**Specifications** 

Specificity: CD138 (Syndecan-1)

Clone: B-A38 Isotype: Mouse IgG1

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

## **Summary and Description**

CD138 (Syndecan-1) is a trans-membranous proteoglycan which is detectable on the cytoplasmic membrane of nearly 95% of plasma cells in formalin-fixed paraffin-embedded tissue sections. Other haematopoietic cells, endothelial cells and lymphoplasmocytoid lymphomas are negative for CD138. CD138 is expressed by pre-B-cells. It is not detectable during further B-cell differentiation and reappears again in the plasma cell stadium (Sanderson *et al.* 1989).

This anti-CD138 antibody is a useful tool for labelling of plasma cells and characterisation of plasmocytoid lymphomas. Various forms of Hodgkin's disease have also been shown positive staining with this antibody.

## Reagent provided

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

 Concentrate:
 1 ml
 (Cat. No. AIB-30018)

 Concentrate:
 0.5 ml
 (Cat. No. AIB-30019)

 Ready-to-use:
 6 ml
 (Cat. No. AIB-30017)

## **Dilution of primary antibody**

Dilution of Nordic BioSites' 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 BioSites' 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 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 BioSites' 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>Nordic BioSite recommendations</u>

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

(BCB-20015 / BCB-20016)

\*Control tissue Plasmacytoma or normal bone marrow

\*Working dilution 1:200 (for concentrates)

\*Incubation time 60 minutes

## **Quality control**

The recommended positive control tissues for this antibody are normal bone marrow or a plasmacytoma. 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.

## **Expected results**

This antibody stains positive in the cytoplasmic membrane of plasma 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. 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 BioSite be liable for any damages arising out of the use of the reagent provided.

#### **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**

Sanderson RD et al. Cell Regul 1:27-35, 1989 Chilosi M et al. Mod Pathol 12:1101-1106, 1999 Bayer-Garner IB et al. Mod Pathol 14:1052-1058, 1999 Wei A and Juneja S. J Clin Pathol 56:406-411, 2003 Coupland SE et al. Br J Ophthalmol 89:352-359, 2005 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:

| Explanations of the symbols on the product label. |   |     |  |   |
|---|---|-----|--|---|
| REF   | Catalog Number<br>Bestellnummer<br>Reference du catalogue   | LOT | Batch Code<br>Chargenbezeichnung<br>Code du lot  | Manufacturer  Nordic BioSite AB Propellervägen 4A S-183 62 Täby Sweden Tel: +46 (0)8 5444 33 40 |
| 53  | Use By<br>Verwendbar bis<br>Utiliser jusque   | IVD | In Vitro Diagnostic Medical Device<br>In vitro Diagnostikum<br>Dispositif médical de diagnostic in vitro |   |
|   | Consult Instructions for use<br>Gebrauchsanweisung beachten<br>Consulter les instructions d'utilisation |     | Temperature Limitation<br>Lagerungstemperatur<br>Limites de température                                  | Fax: +46 (0)8 756 94 90<br>info@nordicbiosite.com<br>www.nordicbiosite.com                      |