Novocastra™ Lyophilized Mouse Monoclonal Antibody Neuroblastoma Marker

Product Code: NCL-NB84

Intended Use: For In Vitro Diagnostic Use: This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.

Specificity: Uncharacterised molecule of 57 kD, found in most normal human tissues, including most epithelial and endothelial cells.

Clone: NB84a

Ig Class: IgG1

Antigen Used for Immunizations: Human neuroblastoma tissue.

Hybridoma Partner: Mouse myeloma (p3-NS1-Ag4-1).

Preparation: Lyophilized tissue culture supernatant containing 15 mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.

Effective on Frozen Tissue: Yes

Effective on Paraffin Wax Embedded Tissue: Yes

Recommendations on Use: Immunohistochemistry: Typical working dilution 1:100–1:200. Trypsin digestion of paraffin sections may be required in some cases. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Effective in indirect flow cytometry. Western Blotting: Not evaluated.

Positive Controls: Immunohistochemistry: Neuroblastoma. Indirect flow cytometry: Kelly cell line.

Staining Pattern: Cytoplasmic.

Storage and Stability: Store unopened lyophilized antibody at 4 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.

General Overview: Neuroblastoma is a complex malignant disease in children. This tumor of the sympathetic nervous system, derived from pathologically maturing neural crest progenitor cells, is unique among paediatric cancers because of spontaneous regressions and catecholamine excretions. Clone NB84a is for use in research studies to aid in understanding the biology of neuroblastoma.

Instructions for Use

Trypsin Digestion for Immunohistochemical Demonstration on Paraffin Sections

1. Preheat the following to 37 °C using a water bath:
   (i) 200 mL of TBS
   (ii) 200 mL of distilled water.
2. Dissolve 0.2 g Trypsin 250 and 0.2 g Calcium chloride in the 200 mL of TBS.
3. Once the Trypsin solution is at 37 °C, pH to 7.8 with 1 M sodium hydroxide.
4. Place rehydrated paraffin sections in the distilled water to preheat the sections to 37 °C for a minimum of 5 minutes.
5. Incubate sections in Trypsin solution at 37 °C. The time required will depend on the antibody and tissue, however, 30 minutes is usually sufficient.
6. Rinse sections in running tap water.
7. Proceed with immunohistochemistry protocol.

Reagents Required but not Supplied

50 mM Tris-buffered saline
Trypsin 250: Difco order code 0152–13 (available from Becton Dickinson).
Calcium chloride
1 M Sodium Hydroxide

* Trypsin containing chymotrypsin should always be used. The enzyme activities can vary from a supplier and between batches. Such variations may affect the incubation time required.