

Novocastra™ Lyophilized Rabbit Polyclonal Antibody Muramidase (Lysozyme)

Product Code: NCL-MURAM

| | |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intended Use | FOR RESEARCH USE ONLY. |
| Specificity | Human muramidase (lysozyme) confirmed by crossed immunoelectrophoresis. |
| Antigen Used for Immunizations | Lysozyme isolated from the urine of patients with monocytic leukemia. |
| Preparation | Lyophilized immunoglobulin fraction purified from rabbit serum diluted in PBS with 1% BSA containing 15 mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label. |
| Effective on Frozen Tissue | No |
| Effective on Paraffin Wax Embedded Tissue | Yes. Trypsin digestion recommended. |
| Recommendations on Use | Immunohistochemistry: Typical working dilution 1:100–1:200. Trypsin digestion of paraffin sections is recommended. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Typical working dilution 1:25–1:50. |
| Positive Controls | Immunohistochemistry: Tonsil or colon. Western Blotting: Tonsil. |
| 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 | Lysozyme is an enzyme with a molecular weight of 14.6 kD that catalyzes the hydrolysis of the bacterial cell wall beta (1-4) glycosidic linkages between N-acetylmuramic acid and N-acetylglucosamine. It is found in spleen, lung, kidney, white blood cells, plasma, milk and tears. Its role is to help fight invading bacteria. |
| General References | Mörsky P. Clinica Chimica Acta. 178: 327–336 (1988). Krugliak L, Meyer P R and Taylor C R. American Journal of Hematology. 21: 99–109 (1986). |



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.*