

Novocastra™ Lyophilized Mouse Monoclonal Antibody CD57

Product Code: NCL-NK1

Intended Use	FOR RESEARCH USE ONLY.
Specificity	Human CD57 antigen.
Clone	NK-1
Ig Class	IgM
Antigen Used for Immunizations	Human peripheral blood mononuclear cells.
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 1:50. Trypsin digestion of paraffin sections may enhance staining in some cases. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Not evaluated.
Positive Controls	Immunohistochemistry: Tonsil or lymph node; natural killer cells located mainly in germinal centers.
Staining Pattern	Membrane.
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	The CD57 myeloid associated glycoprotein, also known as HNK-1, has a molecular weight of 110 kD. The CD57 antigen is found on a subset of mononuclear cells with natural killer activity, neuroectodermal cells expressing myelin associated glycoprotein, but not on erythrocytes or platelets. Immunostaining of a variety of epithelia has been observed with this antibody.
General References	Lanier L L, Le A M, Phillips J H, et al.. Journal of Immunology. 131: 1789–1796 (1983). McGarry R C, Helfand S L, Quarles R H, et al.. Nature. 306: 376–378 (1983). Abo T and Balch C M. Journal of Immunology. 127: 1024–1029 (1981).



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.*