

Novocastra™ Lyophilized Rabbit Polyclonal Antibody Lambda Light Chain

Product Code: NCL-LAMP

Intended Use	FOR RESEARCH USE ONLY.
Specificity	Reactive with human free lambda chains as well as lambda chains in intact immunoglobulin molecules. Traces of contaminating antibodies have been removed by solid-phase absorption with human plasma proteins.
Antigen Used for Immunizations	Polyclonal light chains of lambda type isolated from a pool of human sera.
Preparation	Lyophilized immunoglobulin fraction of 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
Recommendations on Use	Immunohistochemistry: Typical working dilution 1:1000–1:2000. Trypsin digestion of paraffin sections is recommended. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Typical working dilution 1:3000–1:4000. (ECL™, Amersham Pharmacia Biotech).
Positive Controls	Immunohistochemistry: Tonsil. 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	Immunoglobulins are polypeptides and comprise five major classes; immunoglobulin G (IgG), IgA, IgM, IgD and IgE. Each immunoglobulin consists of two identical heavy (H) chains and two identical light (L) chains. These are also subdivided into sub classes eg. IgG1. There are two classes of light chain; kappa and lambda. The ratio of kappa chains and light chains varies between Ig classes and subclasses, but is also species specific. In humans, approximately 60% of light chains are kappa. However, in any particular immunoglobulin molecule the light chain will be either kappa or lambda - never a mixture. B cells contain either kappa or lambda mRNA.
General References	Reimer C B, Philips D J, Aloisio C H, et al.. Hybridoma. 3: 263–275 (1984).



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.*