Novocastra™ Lyophilized Mouse Monoclonal Antibody
Hepatitis B virus (core antigen)

Product Code: NCL-HBcAg-506

Intended Use
FOR RESEARCH USE ONLY.

Specificity
Hepatitis B virus core antigen.

Clone
LF161

Ig Class
IgG1

Antigen Used for Immunizations
Prokaryotic recombinant protein which includes 183 amino acids of the core region of Hepatitis B virus.

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
Not evaluated.

Effective on Paraffin Wax Embedded Tissue
Yes

Recommendations on Use
Immunohistochemistry: Typical working dilution 1:100–1:200. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Not evaluated.

Positive Controls
Immunohistochemistry: Known active hepatitis B infected liver tissue.

Staining Pattern
HBcAg is usually expressed predominantly in the nuclei of hepatitis B virus infected hepatocytes, but variable staining may also be seen in the perinuclear cytoplasm.

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
Hepatitis B virus is one of an expanding list of hepatitis viruses. The complete infective virion is a 42 nm particle (Dane particle). It consists of a core of double-stranded DNA, a specific DNA polymerase and structural proteins. These are surrounded by an outer envelope of surface protein which is recognized serologically as Hepatitis B virus surface antigen (HBsAg). The nucleocapsid contains two serologically distinct antigens, the core antigen (HBcAg) and ‘e’ antigen (HBeAg). Core antigen is localized predominantly within the nucleus of infected hepatocytes.

General References