Novocastra™ Lyophilized Mouse Monoclonal Antibody Varicella-zoster virus

Product Code: NCL-VZV

**Intended Use**

FOR RESEARCH USE ONLY.

**Specificity**

Varicella-zoster virus. NCL-VZV does not crossreact with tissue culture isolates of respiratory syncytial virus, influenza virus types A and B, parainfluenza virus types 1, 2, 3 and 4b, adenovirus, herpes simplex virus types 1 and 2, cytomegalovirus, mumps virus, measles virus, ECHOvirus 19, coxsackie B4 virus, poliovirus types 1, 2 and 3 or negative tissue culture cells used in routine virus isolation.

**Clone**

C90.2.8

**Ig Class**

IgG1, kappa

**Antigen Used for Immunizations**

Varicella-zoster virus (Marsden strain).

**Hybridoma Partner**

Mouse myeloma (JK Ag8.653).

**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**


**Positive Controls**


**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**

Varicella-zoster (chicken pox) virus belongs to the Herpes virus family. Other members of this family include Herpes simplex type 1 (HSV-1), Herpes simplex type 2 (HSV-2), Epstein-Barr virus (EBV) and cytomegalovirus (CMV) amongst others. Members of this family have a characteristic virion structure. The double stranded DNA genome is contained within an icosahedral capsid embedded in a proteinaceous layer ( tegument) and surrounded by a lipid envelope, derived from the nuclear membrane of the last host, which is decorated with virus-specific glycoprotein spikes. These viruses are capable of entering a latent phase where the host shows no visible sign of infection and levels of infectious agent become very low. During the latent phase the viral DNA is integrated into the genome of the host cell.

**General References**

Instructions for Use

Description of Methods for Use of Antiviral Antibodies in Indirect Immunofluorescence

Reagents
1. Acetone-fixed cells infected with appropriate virus (positive control).
2. Acetone-fixed uninfected cells (negative control).
3. Appropriate antibody at dilutions for titration.
4. Secondary FITC-conjugated antibody diluted 1:100 in counterstain (Evans blue 0.0005% w/v in phosphate buffered saline).
5. Appropriate mountant for reading slides—see data sheet.

Equipment
Fluorescence microscope, dark humid slide incubation tray, 37 °C incubator.

Procedures
1. Allow slides to reach 25 °C before starting.
2. Apply Novocastra antibody at appropriate dilution (20 µL/spot).
3. Incubate for 30 minutes at 37 °C in a dark, humid slide incubation tray.
4. Rinse 3 x 5 minutes in phosphate buffered saline (PBS) (pH 7.4).
5. Air dry.
6. Apply diluted FITC-conjugated antibody (as described in REAGENTS, point 4).
7. Incubate for 30 minutes at 37 °C in a dark, humid slide incubation tray.
8. Rinse 3 x 5 minutes in PBS (pH 7.4).
9. Rinse slides for 1 minute in distilled water.
10. Air dry.
11. Read under oil using 50x oil objective (see data sheet for recommendation on particular mounting medium eg Cargille immersion oil, Biosoft Fluokeep etc).