Monoclonal Mouse Anti-Human Papillomavirus (HPV) Clone K1H8

Code M3528

Intended use
For research use only. Not for use in diagnostic procedures.

Summary and explanation
HPV is a non-enveloped DNA virus comprised of an icosahedral capsid and circular, double-stranded DNA. HPV is classified into more than 50 distinct types based on base sequences (1).

Reagent provided
Monoclonal Mouse antibody provided in liquid form as tissue culture supernatant in 0.05 mol/L Tris-HCl, pH 7.2 and 0.015 mol/L sodium azide. This product contains stabilizing protein.

Clone: K1H8  Isotype: IgG\(\_1\), kappa
Mouse lgG concentration mg/L: See label on vial.

Immunogen
Alkaline disrupted HPV type 1 (2).

Specificity
Anti-human papillomavirus, clone K1H8 (anti-HPV) reacts with a non-conformational internal linear epitope of a major capsid protein of HPV-1, which is broadly expressed among the different HPV subtypes. In Western blotting, anti-HPV identified a 57 kD protein, which corresponds to the molecular weight of a major polypeptide of the capsid protein L1. Minor bands of 47, 44, 41 and 33 kD were weakly labelled and thought to be degraded capsid proteins. Anti-HPV has been demonstrated to identify HPV-1 antigen in ELISA and to detect HPV-1 and HPV-6 by indirect immunofluorescence in infected frozen tissue sections. Anti-HPV was found to be immunoreactive with paraffin sections of formalin-fixed HPV-infected tissues which were demonstrated by Southern blot hybridization to be infected with HPV type 6, 11, 16, 18, 31, 33, 42, 51, 52, 56 and 58. Positive immunostaining was largely confined to the nuclei of infected cells. Occasionally, the cytoplasm of koilocytic cells was observed to be immunoreactive (2,3).

Precautions
1. The device is not intended for clinical use including diagnosis, prognosis, and monitoring of a disease state, and it must not be used in conjunction with patient records or treatment.
2. For professional users.
3. This product contains sodium azide (Na\(\text{N}_3\)), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, Na\(\text{N}_3\) may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
4. As with any product derived from biological sources, proper handling procedures should be used.
5. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
6. Unused reagents should be disposed of according to local, State, and Federal regulations.

Storage
Store at 2–8 ° C. Do not use after expiration dates stamped on vial. If reagents are stored under any conditions other than those specified, the conditions must be verified by the user. There are no obvious signs to indicate instability of this product. Therefore, positive and negative controls should be run simultaneously with patient specimens. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the antibody is suspected, contact Dako Technical Support.

Statement of quality
Paraffin Sections
Anti-HPV has been quality controlled by immunohistochemistry (IHC) using the LSAB™2 system. The antibody was diluted 1:50 with Dako Antibody Diluent (Code S0809) and used to immunostain formalin-fixed, paraffin-embedded tissue which was pretreated with heat using Dako Target Retrieval Solution (Code S1700) for 20 minutes.

References