

HPV18 E6 (BF7): sc-53328

BACKGROUND

The human papilloma virus (HPV) family of DNA tumor viruses includes HPV16 and HPV18, which are associated with a large proportion of cervical cancer cases. HPV early proteins E6 and E7 are the major viral oncoproteins that regulate cell proliferation through the inactivation of p53 and Rb1 tumor suppressor proteins, respectively. BF7 can be used for detection of HPV in cervical smears and biopsies and analysis of E6 expression in cell transformation studies.

REFERENCES

1. Reich, N.C., et al. 1983. Two distinct mechanisms regulate the levels of a cellular tumor antigen, p53. *Mol. Cell. Biol.* 3: 2143-2150.
2. Banks, L., et al. 1987. Identification of human papillomavirus type 18 E6 polypeptide in cells derived from human cervical carcinomas. *J. Gen. Virol.* 68: 1351-1359.
3. Zur Hausen, H. and Schneider, A. 1987. The role of papillomaviruses in human angongenital cancer. In Howley, P.M. and Salzman, N.P., eds. *The Papovaviridae, Papillomaviruses*. New York: Plenum, 245-263.
4. Hawley-Nelson, P., et al. 1989. HPV16 E6 and E7 proteins cooperate to immortalize human foreskin keratinocytes. *EMBO J.* 13: 3905-3910.
5. Munger, K., et al. 1989. The E6 and E7 genes of the human papillomavirus type 16 together are necessary and sufficient for transformation of primary human keratinocytes. *J. Virol.* 63: 4417-4421.
6. Munger, K., et al. 1989. Complex formation of human papillomavirus E7 proteins with the retinoblastoma tumor suppressor gene product. *EMBO J.* 8: 4099-4105.
7. Werness, B.A., et al. 1990. Association of human papillomavirus types 16 and 18 E6 proteins with p53. *Science* 248: 76-79.
8. Riou, G., et al. 1990. Association between poor prognosis in early-stage invasive cervical carcinomas and non-detection of HPV DNA. *Lancet* 335: 1171-1174
9. Huibregtse, J.M., et al. 1993. Cloning and expression of the cDNA for E6-AP, a protein that mediates the interaction of the human papillomavirus E6 oncoprotein with p53. *Mol. Cell. Biol.* 13: 775-784.

SOURCE

HPV18 E6 (BF7) is a mouse monoclonal antibody raised against gel-purified HPV18 E6- β -galactosidase fusion protein.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

HPV18 E6 (BF7) is recommended for detection of HPV18 E6 by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of HPV18 E6: 16 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **HPV16 E6/18 E6 (C1P5): sc-460** for HPV16 E6/18 E6 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.