

HPV11 E7 (711-13): sc-66145

BACKGROUND

Human papilloma viruses (HPVs) can be classified as either high risk or low risk according to their association with cancer. HPV16 and HPV18 are the most common of the high risk group, while HPV6 and HPV11 are among the low risk types. Approximately 90% of cervical cancers contain HPV DNA of the high risk types. Mutational analysis have shown that the E6 and E7 genes of the high risk HPVs are necessary and sufficient for HPV transforming function. The specific interactions of the E6 and E7 proteins with p53 and pRB, respectively, correlate with HPV high and low risk classifications. The high risk HPV E7 proteins bind to pRB with a higher affinity than do the low risk HPV proteins, and only the high risk HPV E6 proteins form detectable complexes with p53 *in vitro*.

REFERENCES

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3. Hawley-Nelson, P., Vousden, K.H., Hubbert, N.L., Lowy, D.R. and Schiller, J.T. 1989. HPV16 E6 and E7 proteins cooperate to immortalize human foreskin keratinocytes. *EMBO J.* 8: 3905-3910.
4. Munger, K., Werness, B.A., Dyson, N., Phelps, W.C., Harlow, E. and Howley, P.M. 1989. Complex formation of human papillomavirus E7 proteins with the retinoblastoma tumor suppressor gene product. *EMBO J.* 8: 4099-4105.
5. Munger, K., Phelps, W.C., Bubb, V., Howley, P.M. and Schlegel, R. 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. Riou, G., Faure, M., Jeannel, D.J., Bourhis, J., LeDoussal, V. and Orth, G. 1990. Association between poor prognosis in early-stage invasive cervical carcinomas and non-detection of HPV DNA. *Lancet* 335: 1171-1174
7. Werness, B.A., Levine, A.J. and Howley, P.M. 1990. Association of human papillomavirus types 16 and 18 E6 proteins with p53. *Science* 248: 76-79.
8. Huibregtse, J.M., Scheffner, M. and Howley, P. 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

HPV11 E7 (711-13) is a mouse monoclonal antibody raised against HPV11 E7.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

HPV11 E7 (711-13) is recommended for detection of HPV11 E7 of HPV origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); may cross-react with HPV18 E7 or HPV16 E7.

SELECT PRODUCT CITATIONS

1. Luevano, M., Bernard, H.U., Barrera-Saldana, H.A., Trevino, V., Garcia-Carranca, A., Villa, L.L., Monk, B.J., Tan, X., Davies, D.H., Felgner, P.L. and Kalantari, M. 2010. High-throughput profiling of the humoral immune responses against thirteen human papillomavirus types by proteome microarrays. *Virology* 405: 31-40.
2. Zeng, J., Yang, S., Wang, X., Gao, Y. and Zhang, M. 2017. Effects of siRNA-mediated suppression of HPV-11 L1 expression on the proliferation and apoptosis of vaginal epithelial cells. *Exp. Ther. Med.* 13: 1561-1565.

STORAGE

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

PROTOCOLS

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