

Adenovirus hexon protein (7C11): sc-51747

BACKGROUND

Hexon protein is a major coat protein of adenoviruses. Adenoviruses capsids have three principal protein components: the hexon, the penton and the fiber. Hexon consists of three subunits together forming two major components of different morphological symmetry. A triangular top with three towers of density is superimposed on a more bulky pseudo hexagonal base. The symmetry of the top is in accord with the trimeric nature of hexon, but that of the base derives from the molecular function, which is to provide a densely packed impenetrable protective outer layer for the virion. Research indicates that the Adenovirus hexon protein may be a potent adjuvant for activation of a cellular immune response.

REFERENCES

1. Jörnvall, H., Appella, E., Fowler, A.V. and von Bahr-Lindström, H. 1981. Structural analysis of four large CNBr fragments from [14C]-carboxymethylated Adenovirus hexon protein. *J. Biol. Chem.* 256: 6199-6203.
2. Jörnvall, H., Aleström, P., Akusjärvi, G., von Bahr-Lindström, H., Philipson, L. and Pettersson, U. 1981. Order of the CNBr fragments in the Adenovirus hexon protein. *J. Biol. Chem.* 256: 6204-6212.
3. Zajdel-Blair, M.E., Blair, G.E. and Celis, J.E. 1982. The synthesis and intracellular localization of Adenovirus hexon protein studied by microinjection of mRNA into human cells. *Exp. Cell Res.* 140: 461-464.
4. Waris, M. and Halonen, P. 1987. Purification of Adenovirus hexon protein by high-performance liquid chromatography. *J. Chromatogr.* 397: 321-325.
5. Nász, I. 1989. The composed antigenic structure of the Adenovirus hexon protein. *Virologie* 39: 267-280.
6. Carlisle, R.C., Bettinger, T., Ogris, M., Hale, S., Mautner, V. and Seymour, L.W. 2001. Adenovirus hexon protein enhances nuclear delivery and increases transgene expression of polyethylenimine/plasmid DNA vectors. *Mol. Ther.* 4: 473-483.
7. Molinier-Frenkel, V., Lengagne, R., Gaden, F., Hong, S.S., Choppin, J., Gahery-Segard, H., Boulanger, P. and Guillet, J.G. 2001. Adenovirus hexon protein is a potent adjuvant for activation of a cellular immune response. *J. Virol.* 76: 127-135.
8. Feldman, S.H., Sikes, R.A. and Eckhoff, G.A. 2002. Comparison of the deduced amino acid sequence of guinea pig Adenovirus hexon protein with that of other mastadenoviruses. *Comp. Med.* 51: 120-126.
9. Leen, A.M., Sili, U., Vanin, E.F., Jewell, A.M., Xie, W., Vignali, D., Piedra, P.A., Brenner, M.K. and Rooney, C.M. 2004. Conserved CTL epitopes on the Adenovirus hexon protein expand subgroup cross-reactive and subgroup-specific CD8⁺ T cells. *Blood* 104: 2432-2440.

SOURCE

Adenovirus hexon protein (7C11) is a mouse monoclonal antibody raised against hexon antigen of Adenovirus origin.

PRODUCT

Each vial contains 100 µg IgG_{2a}/IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Adenovirus hexon protein (7C11) is recommended for detection of hexon antigen of Adenovirus serotypes 1, 5, 8 and 27 of Adenovirus origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Adenovirus hexon protein: 117 kDa.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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