Adenovirus-5 hexon (PII) (T-14): sc-103372



The Power to Question

BACKGROUND

Adenoviruses are non-enveloped, icosahedral viruses of the family *Adenoviridae* and contain a double-stranded, linear, non-segmented DNA genome. The adenovirus life cycle consists of an early phase and a late phase, the first of which encompasses genes that are responsible for expressing mainly nonstructural, regulatory proteins, while the latter of which is focused on producing sufficient quantities of structural proteins to pack genetic material produced by DNA replication. Adenoviruses, which exist as over 40 different serotypes, have three principal protein components within their capsid, namely the hexon, the penton and the fiber. Adenovirus-5 hexon (PII), also known as late protein 2 or PII, is a 952 amino acid viral protein that belongs to the *Adenoviridae* hexon protein family. Existing as a homotrimer, Adenovirus-5 hexon (PII) is synthesized during the late stages of infection and functions as one of the structural components of the viral coat.

REFERENCES

- 1. 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.
- Kinloch, R., Mackay, N. and Mautner, V. 1984. Adenovirus hexon. Sequence comparison of subgroup C serotypes 2 and 5. J. Biol. Chem. 259: 6431-6436.
- 3. Nász, I. 1988. The composed antigenic structure of the adenovirus hexon protein. Virologie 39: 267-280.
- Blair, G.E., Dixon, S.C., Griffiths, S.A. and Zajdel, M.E. 1989. Restricted replication of human adenovirus type 5 in mouse cell lines. Virus Res. 14: 339-346.
- 5. Chroboczek, J., Bieber, F. and Jacrot, B. 1992. The sequence of the genome of adenovirus type 5 and its comparison with the genome of adenovirus type 2. Virology 186: 280-285.
- Fabry, C.M., Rosa-Calatrava, M., Conway, J.F., Zubieta, C., Cusack, S., Ruigrok, R.W. and Schoehn, G. 2005. A quasi-atomic model of human adenovirus type 5 capsid. EMBO J. 24: 1645-1654.
- 7. Vellinga, J., Van der Heijdt, S. and Hoeben, R.C. 2005. The adenovirus capsid: major progress in minor proteins. J. Gen. Virol. 86 (Pt. 6): 1581-1588.
- 8. Waddington, S.N., McVey, J.H., Bhella, D., Parker, A.L., Barker, K., Atoda, H., Pink, R., Buckley, S.M., Greig, J.A., Denby, L., Custers, J., Morita, T., Francischetti, I.M., Monteiro, R.Q., Barouch, D.H., van Rooijen, N., Napoli, C., Havenga, M.J., Nicklin, S.A. and Baker, A.H. 2008. Adenovirus serotype 5 hexon mediates liver gene transfer. Cell 132: 397-409.
- 9. Kalyuzhniy, O., Di Paolo, N.C., Silvestry, M., Hofherr, S.E., Barry, M.A., Stewart, P.L. and Shayakhmetov, D.M. 2008. Adenovirus serotype 5 hexon is critical for virus infection of hepatocytes *in vivo*. Proc. Natl. Acad. Sci. USA 105: 5483-5488.

SOURCE

Adenovirus-5 hexon (PII) (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Adenovirus-5 hexon (PII) of viral origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103372 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Adenovirus-5 hexon (PII) (T-14) is recommended for detection of Adenovirus-5 hexon (PII) of virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Adenovirus-5 hexon monomer: 108 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com