HTLV-1 p19 (TP-7): sc-57870



The Power to Question

BACKGROUND

Human T-lymphotropic virus (HTLV) is a single-stranded RNA retrovirus that causes T cell leukemia and T cell lymphoma in human adults and may be involved in a few demyelinating diseases. HTLV-1 is a member of the HTLV family that is associated with several kinds of diseases including HTLV-1-associated myelopathy, infection with *Strongyloides stercoralis*, and a virus cancer link to leukemia. HTLV-1 transmission probably occurs via sexual contact, childbirth and through exposure to contaminated blood. HTLV-1 p19 is a major core viral protein encoded by the gag gene. Differential antibody responsiveness to p19 gag can be used in the serological discrimination between HTLV-1 and HTLV-2.

REFERENCES

- Greaves, M.F., Verbi, W., Tilley, R., Lister, T.A., Habeshaw, J., Trainor, C.D., Robert-Guroff, Guo, H.G., M., Blattner, W. and Reitz, M. 1984. Human T cell leukemia virus (HTLV) in the United Kingdom. Int. J. Cancer 33: 795-806.
- Lal, R.B., Brodine, S.K., Coligan, J.E. and Roberts, C.R. 1992. Differential antibody responsiveness to p19 gag results in serological discrimination between human T-lymphotropic virus type 1 and type 2. J. Med. Virol. 35: 232-236.
- Ebersold, A., Noraz, N., Grange, J., Gasmi, M., Grange, M.P., Souche, S., Mamoun, R. and Desgranges, C. 1993. Production and characterization of a monoclonal antibody directed against HTLV-1 p19: use in a specific capture enzyme immunoassay. Hybridoma 12: 185-195.
- Takahashi, H. 1993. Molecular characterization of human T cell lymphotrophic virus type 2. Hokkaido Igaku Zasshi 68: 485-95.
- Zrein, M., Louwagie, J., Boeykens, H., Govers, L., Hendrickx, G., Bosman, F., Sablon, E., Demarquilly, C., Boniface, M. and Saman, E. 1998. Assessment of a new immunoassay for serological confirmation and discrimination of human T cell lymphotropic virus infections. Clin. Diagn. Lab. Immunol. 5: 45-49.
- 6. Ding, Y.S., Rich, D.H. and Ikeda, R.A. 1999. Substrates and inhibitors of human T cell leukemia virus type 1 protease. Biochemistry 37: 17514-17518.
- 7. Xie, L. and Green, P.L. 2005. Envelope is a major viral determinant of the distinct *in vitro* cellular transformation tropism of human T cell leukemia virus type 1 (HTLV-1) and HTLV-2. J. Virol. 79: 14536-14545.
- Hiraragi, H., Kim, S.J., Phipps, A.J., Silic-Benussi, M., Ciminale, V., Ratner, L., Green, P.L. and Lairmore, M.D. 2006. Human T-lymphotropic virus type 1 mitochondrion-localizing protein p13^{II} is required for viral infectivity *in vivo*. J. Virol. 80: 3469-3476.
- Yao, K., Hisada, M., Maloney, E., Yamano, Y., Hanchard, B., Wilks, R., Rios, M. and Jacobson, S. 2006. Human T-lymphotropic virus types 1 and 2 Western blot seroindeterminate status and its association with exposure to prototype HTLV-1. J. Infect. Dis. 193: 427-437.

SOURCE

HTLV-1 p19 (TP-7) is a mouse monoclonal antibody raised against HTLV-1 p19.

PRODUCT

Each vial contains 100 μg lgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HTLV-1 p19 (TP-7) is recommended for detection of HTLV-1 p19 of HTLV-1 origin 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); may cross-react with HTLV-2 p19.

Moelcular Weight of HTLV-1 p19: 34 kDa.

SELECT PRODUCT CITATIONS

 Polakowski, N., Sarker, M.A.K., Hoang, K., Boateng, G., Rushing, A.W., Kendle, W., Pique, C., Green, P.L., Panfil, A.R. and Lemasson, I. 2023. HBZ upregulates myoferlin expression to facilitate HTLV-1 infection. PLoS Pathog. 19: e1011202.

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 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