SANTA CRUZ BIOTECHNOLOGY, INC.

HTLV-2 p24 (75/4.21.11): sc-57876



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-Iassociated myelopathy, infection with Strongyloides stercoralis and a virus cancer link to leukemia. Human T-lymphotropic virus (HTLV) is a singlestranded 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-I-associated myelopathy, infection with Strongyloides stercoralis and a virus cancer link to leukemia. HTLV-2 shares approximately 70 percent genomic homology with HTLV-1 and is associated with several cases of myelopathy/tropical spastic paraparesis (HAM/TSP)- like neurological disease. HTLV-2 p19 and p24 are major core viral proteins 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., et al. 1984. Human T cell leukemia virus (HTLV) in the United Kingdom. Int. J. Cancer 33: 795-806.
- Lal, R.B., et al. 1992. Differential antibody responsiveness to p19 gag results in serological discrimination between human T-lymphotropic virus type I and type II. J. Med. Virol. 35: 232-236.
- Ebersold, A., et al. 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 II. Hokkaido lgaku Zasshi 68: 485-95.
- Zrein, M., et al. 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.
- Ding, Y.S., et al. 1999. Substrates and inhibitors of human T cell leukemia virus type I protease. Biochemistry 37: 17514-17518.
- 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., et al. 2006. Human T-lymphotropic virus type 1 mitochondrionlocalizing protein p13(II) is required for viral infectivity *in vivo*. J. Virol. 80: 3469-3476.
- Yao, K., et al. 2006. Human T-lymphotropic virus types I and II western blot seroindeterminate status and its association with exposure to prototype HTLV-I. J. Infect. Dis. 193: 427-437.

SOURCE

HTLV-2 p24 (75/4.21.11) is a mouse monoclonal antibody raised against HTLV-2 p24.

PRODUCT

Each vial contains 100 $\mu g~lgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HTLV-2 p24 (75/4.21.11) is recommended for detection of HTLV-2 p24 of HTLV-2 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); may cross-react with HTLV-I p24.

Molecular Weight of HTLV-2 p24: 26 kDa.

DATA



HTLV-2 p24 (75/4.21.11): sc-57876. Western blot analysis of HTLV-1 recombinant p24 core protein.

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.