

EBV LMP-1 (3H2104,a,b,c): sc-71023

BACKGROUND

Epstein-Barr virus (EBV), also designated human herpesvirus 4 (HHV-4), is a member of the herpesvirus family and is one of the most common human viruses, infecting about 90% of the population. EBV infects only B lymphocytes and, though often asymptomatic, it can cause infectious mononucleosis, a disease characterized by fatigue, fever, sore throat and muscle soreness. The linear genome of EBV circularizes once it enters the cell and exists there as an episome. The virus can execute either a lytic cycle, which results in the staged expression viral proteins with the ultimate objective of producing infectious virions, or a latent cycle, which allows the virus to exist in a host for years. EBV may play a role of the development of both Burkitt lymphoma, a disease in which a tumor can form on the mandible or maxilla, and nasopharyngeal carcinoma, a tumor found in the upper respiratory tract, most commonly in the nasopharynx.

REFERENCES

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SOURCE

EBV LMP-1 (3H2104,a,b,c) is a mouse monoclonal antibody raised against recombinant fusion protein containing sequences of bacterial β -galactosidase and EBV encoded latent membrane protein.

PRODUCT

Each vial contains a cocktail of four antibodies recognizing different epitopes in 250 μ l culture supernatant containing IgG₁ with < 0.1% sodium azide.

RESEARCH USE

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

APPLICATIONS

EBV LMP-1 (3H2104,a,b,c) is recommended for detection of LMP-1 of Epstein-Barr Virus origin by immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200); may cross-react with EBV positive lymphoblastoid cell lines and EBV infected B cell immunoblasts in infectious mononucleosis.

SELECT PRODUCT CITATIONS

1. Moreno, M.A., Or-Geva, N., Aftab, B.T., Khanna, R., Croze, E., Steinman, L. and Han, M.H. 2018. Molecular signature of Epstein-Barr virus infection in MS brain lesions. *Neurol. Neuroimmunol. Neuroinflamm.* 5: e466.
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3. Guo, R., Zhang, Y., Teng, M., Jiang, C., Schineller, M., Zhao, B., Doench, J.G., O'Reilly, R.J., Cesarman, E., Giulino-Roth, L. and Gewurz, B.E. 2020. DNA methylation enzymes and PRC1 restrict B-cell Epstein-Barr virus oncoprotein expression. *Nat. Microbiol.* 5: 1051-1063.
4. Deng, Y., Liu, X., Huang, Y., Ye, J., He, Q., Luo, Y., Chen, Y., Li, Q., Lin, Y., Liang, R., Li, Y., Wei, J. and Zhang, J. 2023. STIM1-regulated exosomal EBV-LMP1 empowers endothelial cells with an aggressive phenotype by activating the Akt/ERK pathway in nasopharyngeal carcinoma. *Cell. Oncol.* E-published.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PROTOCOLS

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