SANTA CRUZ BIOTECHNOLOGY, INC.

Bu-1a (5K98): sc-70447



BACKGROUND

The regulation of cell death is important for the immune system to function properly. T and B lymphocytes must be censored during their development so that the body can remove the nonfunctional or self-reactive lymphocytes. Genetically polymorphic cell surface antigen (Bu-1) antigens are type I transmembrane glycoproteins that may have an important role in controlling cell survival and/or adhesion during B cell development. Bu-1 is expressed on B cells as well as on a subset of macrophages. Embryonic spleen and bone marrow cells carry the Bu-1 antigen, marking these tissues as prebursal precursors for B cells. Bu-1 can induce a rapid form of cell death similar to apoptosis. Bu-1a and Bu-1b represent the recessive and dominant allelic products, respectivley, of the Bu-1 gene.

REFERENCES

- Brand, A., et al. 1983. Committed precursors of B and T lymphocytes in chick embryo bursa of Fabricius, thymus, and bone marrow. Eur. J. Immunol. 13: 449-455.
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- Houssaint, E., et al. 1987. Ontogeny and tissue distribution of the chicken Bu-1a antigen. Immunology 62: 463-470.
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- 8. Funk, P.E., et al. 1997. The avian chB6 (Bu-1) alloantigen can mediate rapid cell death. J. Immunol. 159: 1695-1702.
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SOURCE

Bu-1a (5K98) is a mouse monoclonal antibody raised against bursal cells of one day old H.B15 (Bu-1a/b) strain of chicken origin.

PRODUCT

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

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Bu-1a (5K98) is recommended for detection of Bu-1a on bursal cells, thymocytes, spleen cells and peripheral blood cells of avian origin by immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells); non cross-reactive with cells from CHA and H.B15 strains by immunofluorescence.

Molecular Weight of Bu-1a: 24 kDa.

SELECT PRODUCT CITATIONS

- Sarkies, P., et al. 2012. FANCJ coordinates two pathways that maintain epigenetic stability at G-quadruplex DNA. Nucleic Acids Res. 40: 1485-1498.
- Schiavone, D., et al. 2014. Determinants of G quadruplex-induced epigenetic instability in REV1-deficient cells. EMBO J. 33: 2507-2520.
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- 4. Guilbaud, G., et al. 2017. Local epigenetic reprogramming induced by G-quadruplex ligands. Nat. Chem. 9: 1110-1117.
- Wu, J.T., et al. 2020. Potential synergistic effects of sorafenib and CP-31398 for treating anaplastic thyroid cancer with p53 mutations. Oncol. Lett. 19: 3021-3026.

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.