SANTA CRUZ BIOTECHNOLOGY, INC.

GGPL-I (LI-77): sc-13570

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The genus *Mycoplasma* comprises the smallest organisms lacking cell walls that can self-replicate. *Mycoplasma* is attributed to various diseases in humans, including hematopoietic, joint, central nervous system, liver, pancreas and cardiovascular syndromes. *Mycoplasma fermentans* is present in human mucosal tissues, saliva and oropharyngeal of 45% of healthy adults. *M. fermentans* possesses a unique choline metabolic pathway that generates phosphocholine-containing glycoglycerolipids, 6'-O-phosphocholine-α-glucopyranosyl-(1'-3)-1,2-diacyl-sn-glycerol (GGPL-I) and 1'-phosphocholine, 2'-amino dihydroxypropane-3'-phospho-6'-alpha-glucopyranosyl-(1'-3)-1,2-diacyl-glycerol (GGPL-III). The frequency of antibodies to GGPL-III is significantly higher in sera from HIV-1 infected people than from HIV-1 negative healthy donors, suggesting that *Mycoplasma fermentans* is an influence in the pathogenicity of acquired immunodeficiency syndrome (AIDS).

REFERENCES

1. Matsuda, K., Harasawa, R., Li, J.L., Kasama, T., Taki, T., Handa, S., and Yamamoto, N. 1995. Identification of phosphocholine-containing glycoglycerolipids purified from *Mycoplasma fermentans*-infected human helper T cell culture as components of *M. fermentans*. Microbiol. Immunol. 39: 307-313.
2. Matsuda, K., Ishizuka, I., Kasama, T., Handa, S., Yamamoto, N., and Taki, T. 1997. Structure of a novel phosphocholine-containing aminoglycoglycerolipid of *Mycoplasma fermentans*. Biochem. Biophys. Acta 1349: 1-12.
3. Li, J.L., Matsuda, K., Takagi, M., and Yamamoto, N. 1997. Detection of serum antibodies against phosphocholine-containing aminoglycoglycerolipid specific to *Mycoplasma fermentans* in HIV-1 infected individuals. J. Immunol. Methods 208: 103-113.
4. Matsuda, K., Li, J.L., Harasawa, R., and Yamamoto, N. 1997. Phosphocholine-containing glycoglycerolipids (GGPL-I and GGPL-III) are species-specific major immunodeterminants of *Mycoplasma fermentans*. Biochem. Biophys. Res. Commun. 233: 644-669.
5. Matsuda, K., Li, J.L., Ichinose, S., Harasawa, R., Saito, M., and Yamamoto, N. 2000. Monoclonal antibody against *Mycoplasma fermentans*-specific aminoglycoglycerolipid. Microbiol. Immunol. 44: 695-702.

SOURCE

GGPL-I (LI-77) is a mouse monoclonal antibody raised against GGPL-1 of *Mycoplasma fermentans* origin.

PRODUCT

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

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.

APPLICATIONS

GGPL-I (LI-77) is recommended for detection of GGPL-I of *Mycoplasma fermentans* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PROTOCOLS

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