
The Possible Benefits of Imm-Kine®, a Dietary Supplement

- Helps support both humoral and cellular immune responses*
 - Helps stimulate enhanced macrophage activity*
-

Description

Imm-Kine® provides nutritional support for the immune system.* Imm-Kine® contains Muramyl polysaccharide glycan complex (MPGC), a purified and non-toxic bacterial cell wall extract of gram-positive *Lactobacillus fermentum*, and beta-1, 3-glucan. Research suggests that Imm-Kine® may have a stimulatory effect on the immune system, increase the production of interleukins 1, 6 and 12, and stimulate human lymphocyte proliferation.*

Research has shown that some polysaccharide components of various plants and bacteria can enhance the body's immune response.* The health promoting effects of various mushrooms such as Reishi, Cordyceps, Maitake, and Shiitake, used through the millennia in Eastern medicine, are thought to involve their content of beta-glucans.* Recently, similar immunologically potent polysaccharides have been identified in the cell walls of various bacteria.* Some have suggested that this ability of bacterial cell wall components to enhance the immune response may be partially responsible for the health benefits of probiotic bacteria, such as Bifidobacterium, *Lactobacillus casei* and *Lactobacillus acidophilus*.*

Many scientific studies have demonstrated the efficacy of muramyl compounds such as MPGC in stimulating the immune system.* For instance, another immune stimulating bacterial cell wall analog, muramyl tripeptide phosphatidylethanolamine, improved Kupffer cell function and protected cells in an animal model. Muramyl compound immuno-stimulators, natural and synthetic, can activate macrophages, thereby supporting the immune system.*

MPGC contains muramic acid moieties attached to variable-length mannose-rich polysaccharides. The mannose-rich polysaccharides can promote internalization of the muramic acid-containing complex. Once internalized, the muramic acid moieties of the MPGC may promote activation of macrophages.* MPGC also appears to increase human lymphocyte proliferation, and the production of human antigen-presenting dendritic cells in vitro.*

Imm-Kine® combines the immune stimulant MPGC with beta-1,3-glucan, to provide a broad-spectrum immune enhancing supplement.*

*THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.

Serving Size: 2 Capsules
Servings Per Container: 30

Amount Per Serving:

| | |
|---|--------|
| <i>Lactobacillus fermentum</i> Extract | 500 mg |
| Beta-1,3-Glucan (from <i>Saccharomyces cerevisiae</i>) | 100 mg |

Other ingredients: Gelatin, rice flour, ascorbyl palmitate.

Suggested Use: As a dietary supplement, 2 capsules one to three times daily, or as directed by a healthcare practitioner.

Caution: Not intended for use by pregnant or lactating women. Seek the advice of a healthcare practitioner before using this product.

References

- Anderson DP. Dev Biol Stand 1997;90:257-65.
Cangemi de Gutierrez RC, Santos de Araoz VS, Nader-Macias ME. Biol Pharm Bull 2000;23:973-8.
Chen T, Isomaki P, Rimpilainen M, et al. Clin Exp Immunol 1999;118:261-7.
Chin J, Turner B, Barchia I, et al. Immunol Cell Biol 2000;78:55-66.
Cleveland MG, Gorham JD, Murphy TL, et al. Infect Immun 1996;64:1906-12.
Fullerton SA, Samadi AA, Tortorelis DG, et al. Mol Urol 2000;4:7-13.
Gyorffy S, Palmer K, Podor TJ, et al. J Immunol 2001;166:6212-7.
Jackson DE, Howlett CR, Wicken AJ, et al. Int Arch Allergy Appl Immunol 1981;65:304-12.
Jackson DE, Wicken AJ, Jackson GD. Int Arch Allergy Appl Immunol 1981;65:203-11.
Karpoff HM, Jarnagin W, Delman K, et al. Surgery 2000;128:213-8.
Killion JJ, Fidler IJ. Pharmacol Ther 1998;78:141-54.
Maassen CB, van Holtten-Neelen C, Balk F, et al. Vaccine 2000;18:2613-23.
Matsuzaki T, Chin J. Immunol Cell Biol 2000;78:67-73.
Pabst MJ, Beranova-Giorgianni S, Krueger JM, Meng et. al. U.S. Patent pending, 2000.
Neuroimmunomodulation 1999;6:261-83.
Puri N, Sinko PJ. J Control Release 2000;69:69-80.
Riordan N, Meng X, Taylor P, et al. 2000. Comprehensive Cancer Care 2000, Arlington, Virginia.
Rush CM, Hafner LM, Timms P. J Med Microbiol 1994;41:272-8.
Silva de Ruiz C, Lopez de Bocanera ME, Nader de Macias ME, et al. Biol Pharm Bull 1996;19:88-93.
Soergel SA, MacEwen EG, Vail DM, et al. J Immunother 1999;22:443-53.
Srisatjaluk R, Doyle RJ, Justus DE. Microb Pathog 1999;27:81-91.
Srividya S, Roy RP, Basu SK, et al. J Leukoc Biol 2000;67:683-90.
Yoo YC, Yoshimatsu K, Hatsuse R, et al. Vaccine 1995;13:1300-5.



Allergy Research Group®
2300 North Loop Road, Alameda, CA 94502
Phone: 800-545-9960 or 510-263-2000
Fax: 800-688-7426 or 510-263-2100
www.AllergyResearchGroup.com

*THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.