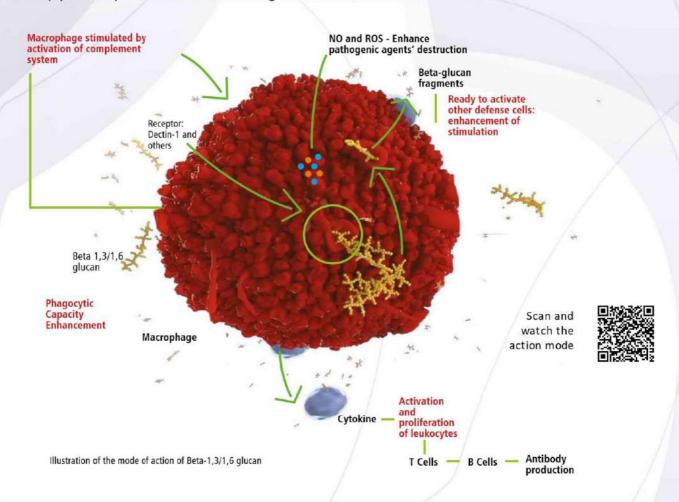


MACROGARD: The world's most studied Beta-Glucan!

Source of highly purified Beta-1,3/1,6 glucans, MacroGard is extracted from Saccharomyces cerevisiae yeast by a process that preserves the structure of the molecule and ensures its high bioactivity and a minimum concentration of 60% beta-glucans.

How does MacroGard act?

The primary function of purified beta-1,3/1,6 glucans is to stimulate the phagocytes, making them more active and prepared to internalize, digest and destroy pathogenic agents. During this process, signaling molecules (cytokines) are secreted enhancing the natural defenses.



Lysozyme and other antimicrobial peptides are also intensively produced, enhancing the potential of the natural defenses. The released cytokines activate the T cells, and hence the antibody-producing B cells. All these factors collaborate synergistically in preparing the animals to face the environmental challenges.

More health and performance with MacroGard!

INCLUSION LEVEL

- · Pet 0.8 - 1.0 kg/ton (full diet) or 10 - 15 mg/kg body weight /day
- · Pig 100 - 500 g/ton of food

- Fish l kg/ton of feed or 12.5 mg/kg live weight/day
- Poultry 50 - 150g/ton

Regulations may vary from country to country. Always check local regulations and requirements regarding the use of this product and its claims.





MacroGard® FAQs

1. What is MacroGard®?

MacroGard® is 60% beta-1,3/1,6-glucan from the cell wall of live baker's yeast. MacroGard® is a source of highly purified and exposed beta-1,3/1,6-glucans with highest biological activity preserved.

2. How is MacroGard® produced?

MacroGard® is produced through a patented extraction technology of a small and selected portion of a unique and special yeast, <u>Saccharomyces cerevisiae</u>.

3. How does MacroGard® work?

When ingested by animal, MacroGard® binds to specific receptors on the surface of macrophages which then engulf and breakdown MacroGard® into smaller bioactive particles and produce large amounts of signaling molecules to enhance the defense cells of the body for the rapid and efficient elimination of bacteria and viruses.

Macrogard® enhances the sensitivity of immune system to antigen and stimulates various immune reactions including antibody production without any negative side effects.

MacroGard® is able to modulate the body response promoting an effective reaction of the immune system and maintaining the animal's health and performance until infection is eradicated.

4. How does MacroGard® differ from other beta-glucans and immune boosters?

- MacroGard® is non-GMO and 100% natural.
- MacroGard® is Halal certified.
- MacroGard® has the right beta-glucan structure (preserved molecular structure).
- MacroGard® is produced from primary fermentation.
- MacroGard® has direct effect on immune system.
- MacroGard® has no known toxic effect.

5. What is the recommended usage of MacroGard®?

Regular use:

Sow and piglets: 100g-200g/ton of feed

Hog growers: 100g/ton of feed

Challenged conditions:

Sow and piglets: 300-500g/ton of feed

Hog growers: 200g/ton of feed

Direct feeding:

Sow: 5-10g per head

Piglets: 2.5g/L of water per 10 heads