# **@Gen**BioChem<sup>®</sup> Immunity

## GenBioChem® Immunity boosts a powerful immune defence.

NPN: 80094051





Standardized using GenBioChem® Triple Fingerprinting Technology



#### **Supplement Facts**

Each capsule contains:

#### **Medicinal Ingredients:**

- 200 mg of proprietary 5:1 extract PBG-002 from the root of Panax quinquefolius (American ginseng)
- 0.35 mg Elemental ZInc (zinc acetate)

#### **Non-Medicinal Ingredients:**

· Capsule (Hypromellose, titanium dioxide)

#### Effects:

Active ingredients have been shown to:

- Boost immune cells' (natural killer cells, T-cells) response to viruses
- Help maintain a healthy immune system
- Help maintain immune function

#### **Recommended Dose:**

- Take 2 capsules daily for maintaining a healthy immunity;
- Take 3-4 capsules, 3 times daily for rapid boosting of immune defence. Take as early as possible at the onset of feeling run-down. Take a few hours before or after taking other medications. Take with food.

#### **Cautions and Warnings:**

- Consult a health care professional prior to use if you have diabetes or are taking blood thinners or digoxin.
- Not recommended for those with known hypersensitivity and/or allergies to any of the ingredients.

#### **Target Populations**

12 years and older, people with a weakened immune system including the following populations:

- People with a weakened immune system due to poor health or age
- · People susceptible to flu and other infections
- People recovering from a long-term and/or serious illness
- People who experience chronic physical and mental stress and lack of sleep
- · People undergoing intensive exercise regimens or athletic training
- People who want to maintain a healthy immune system

#### **Our Unique Platform Technology**

Our scientific and medical team have developed a breakthrough proprietary technology platform, GenBioChem® Triple Fingerprinting Technology™. Several cutting-edge analytic and biomedical technologies are involved in this technology platform.

Our GenBioChem® Triple Fingerprinting Technology ensures quality, authenticity and purity throughout our entire production cycle from lab to shelf.



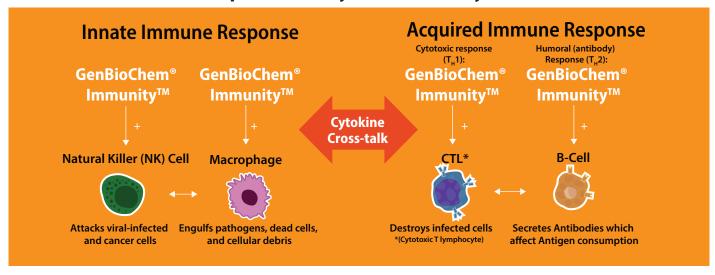
### ---- Mechanism of Action

## GenBioChem® Immunity enhances innate and acquired immune responses safely and effectively.

The immune system is a collection of structures, tissues, immune cells, antibodies, cytokines and physiology processes within the body. Immune function is the body's defense against infectious organisms (virus and bacteria), cancer cells and other invaders. Through a series of steps called the immune response, the immune system attacks organisms and substances that invade body systems and cause illness.

PBG-002 is a proprietary formulation developed by our scientific team led by Dr. Jacqueline Shan. The active ingredient PBG-002 activates both the innate (rapid, non-specific) and adaptive (delayed responses with antigen specificity and immunological memory) immune response. An important aspect of its unique mechanism of action is its ability to enhance natural killer (NK) cells and TH1 (cell-mediated immunity), which is known to promote the immune response and is required for host defense against viral infection.

## GenBioChem® Immunity enhances innate and acquired immune responses safely and effectively.



#### **NK Cell**



In the presence of a virus:

- Increases number of Natural Killer (NK) Cells
- Activates NK cells to secrete interferon-γ (IFN-γ)

#### **B** Cell



- Increases proliferation of B-lymphocytes
- Increases Antibody immunoglobulin (IgG) production
- Increase lymphocyte release of Interleukin-2 (IL-2) and IFN-γ

#### Macrophage



- Increases proportion of Monocytes (Macrophage precursors) in the blood
- Increases Macrophage release of Cytokines: Interleukin-1 (IL-1) Interleukin-6 (IL-6), Tumor Necrosis Factor-α (TNF-α), and Nitritic Oxide (NO).

#### **Our Company:**

GenBioChem® Immunity is developed and manufactured by PBG BioPharma Inc. PBG BioPharma is a vertically integrated biopharmaceutical Canadian company. We are committed to becoming a world leader in research, development and manufacturing of evidence-based natural health products and therapeutics using our proprietary GenBioChem® Triple Fingerprinting Technology.

#### **Our Founder and Chief Scientist:**

Dr. Jacqueline Shan is an award-winning international scientist and business leader and the creator of the #1 selling cold and flu product in Canada, COLD-fX®. She leads a team of scientists and medical professionals in Canada and around the world to research and develop innovative biotechnologies and biomedical products.