



# **Immunopropophyt**

100% Natural Medicine to Enhance Immune System

**Suitable for Pet** 

**Oral solution** 

#### **Ingredients:**

- Propolis Extract
- Echinacea purpurea Extract
- Licorice Extract

The weakness and inefficiency of the immune system in pets such as dogs, cats and companion birds makes the animal susceptible to viral, bacterial, fungal and parasitic infections and leads to a decrease in life quality and lifespan. Enhancing and improving the immune system in shelters, pet pensions and houses where several pets live together, due to the ease of transmission of viral diseases such as infectious peritonitis, panleukopenia, feline leukemia, parvovirus, distemper, feline immunodeficiency virus, herpes virus, calcivirus and many other viral and bacterial diseases is essential. The use of Immunopropophyte – the natural immune enhancing medicine- in young and old animals, animals with Cushing's syndrome and diabetes, animals under corticosteroid therapy and antibiotic therapy, pregnant animals, animals under stress, and cats with immunodeficiency syndrome (feline AIDS) and leukemia is highly recommended to prevent secondary and opportunistic viral, bacterial and fungal infections.



#### Mechanism of action:

Propolis is a sticky resinous substance produced by worker bees and its duty is protecting the hive, preventing the entry of invaders and preventing the growth of bacteria, viruses and fungi. Propolis contains flavonoid compounds, aromatic and aliphatic acids, terpenoids, fatty acids, amino acids, polysaccharides, vitamins and various minerals. Some of the most important benefits of propolis are antibacterial, antiviral, antifungal, anti-parasitic, anti-inflammatory, antioxidant and anticancer properties. Due to its rich content of flavonoids, phenolic acids and terpenoids, propolis stimulates the cellular and humoral immune system by stimulating the proliferation of peripheral lymphocytes and increasing the secretion of antibodies, stimulating T lymphocytes and increasing the phagocytosis percentage, and as a result, it strengthens the immune responses against pathogens.

The use of propolis ethanolic extract in canine parvovirus (CPV) and canine coronavirus (CCoV) stimulates the production of antibodies against these pathogens. Using propolis in canine distemper enhances the immune system.

Also, using propolis in case of infection with Toxoplasma parasite- which can be transmitted to humans- leads to an increase in serum cytokines and immune response.

Echinacea plant has antibacterial, antiviral, anti-inflammatory, antioxidant properties and regulates the function of the immune system. The most important compounds of this plant are classified as alkamides, phenolic compounds, glycoproteins and polysaccharides. Echinacea stimulates the immune response against pathogens by activating macrophages, polymorphonuclear leukocytes and natural killer cells (NK-cells) and increasing phagocytosis. Arabinogalactan which is present in this plant stimulates and regulates the function of the complement system. Also, Echinacea extract acts as a hematinic agent and increases the synthesis of hemoglobin and thus increases the number of red blood cells, and by this way plays a significant role in enhancing the immune system and other organs. Therefore, the use of echinacea extract in dogs and cats causes a significant increase in white and red blood cells such as lymphocytes and hemoglobin and a decrease in neutrophils.

Also, after distemper and parvovirus vaccination of dogs, consumption of echinacea extract significantly increases the antibody against these viruses and thus enhances the immune system.



Licorice extract contains various compounds including triterpenoid saponins, flavonoids, isoflavones, coumarins, various amino acids and polysaccharides. Its main saponin compounds are glycyrrhizic acid and glycyrrhizin. Triterpenoids and other compounds, including flavonoids, in licorice extract have antioxidant properties and reduce oxidative stress caused by physical (heat, transportation, humidity) and chemical factors (aflatoxins in food, etc.) and as a result, they improve blood biochemical indicators and organ function.

Glycyrrhizin causes the secretion of cytokines involved in the development of T lymphocytes and plays an effective role in creating cellular immune responses. Also, glycyrrhizic acid strengthens the immune system against bacterial and viral agents by stimulating the secretion of antibodies and gamma interferon. Licorice prevents and heals gastrointestinal ulcers by increasing mucus secretion as well as its anti-pepsin activity. On the other hand, by increasing the duration and intensity of the effect of cortisone in the body, licorice extract reduces the secretion of stomach acid and, as a result, reduces the formation of gastic ulcers.

According to the properties of these natural extracts, the Immunopropophyte product strengthens cellular and humoral immunity and leads to an increase in the body's resistance to diseases and also accelerates the healing process of diseases.





# **Immunopropophyt Indications:**

- Improving the function of the immune system in response to vaccination
- Enhancing the immune system against pathogens (viral, bacterial, fungal, etc.)
- Preventing bacterial and viral infections
- Controlling the spread of viral diseases in dogs such as canine parvovirus and distemper
- Controlling the spread of viral diseases in cats such as calicivirus and herpesvirus
- Improving gastrointestinal inflammations and ulcers caused by infectious diseases
- Improving bronchial inflammations and secretions
- Reducing coughing in asthma





## **Recommended dosage:**

Pet: 0.5 ml (10 drops) per 10 kg of body weight

Companion birds: 1 to 3 drops per day

#### **Storage Conditions:**

Store in a cool and dry place at 25°C and away from direct sunlight.

### **Drug Interaction:**

Compatible with all kinds of commonly used medicines, additives and vaccines.

#### **Cautions:**

Keep out of reach of children

In case of accidental eye contact, wash immediately with plenty of water

#### Packaging:

30 ml bottles

## **Expiration Date:**

24 months from production date





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