



**ADVANCED  
BIOTECHNOLOGIES**

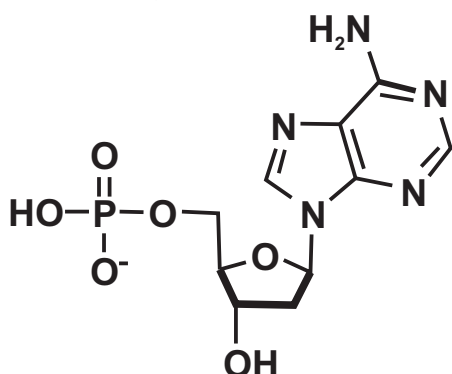
Trusted Friend of the Bio – World

## ADDNUCLEO FISH -

Immunity &  
Intestinal Health

### Introduction:

Nucleotides are semi essential nutrients that are the structural units of the nucleic acid in cells. Their molecular composition of nucleotide is based on a sugar, a nitrogen base and one to three phosphate groups. Nucleotides also play a central role in metabolism at the fundamental, cellular level. They carry packets of chemical energy in the form of the nucleoside triphosphates ATP, GTP, CTP and UTP—throughout the cell to the many cellular functions that demand energy, which include synthesizing amino acids, proteins and cell membranes and parts; moving the cell and moving cell parts, both internally and intercellularly and dividing the cell. In addition, nucleotides participate in cell signaling and are incorporated into important cofactors of enzymatic reactions.



**Diagram:** This nucleotide contains the five-carbon sugar deoxyribose (at center), a nitrogenous base called adenine (upper right), and one phosphate group (left). The deoxyribose sugar joined only to the nitrogenous base forms a Deoxyribonucleoside called deoxyadenosine. Whereas the whole structure along with the phosphate group is a nucleotide, a constituent of DNA with the name deoxyadenosine monophosphate.

Research on dietary nucleotides in fishes has shown they may improve growth in early stages of development, enhance larval quality via brood stock fortification, alter intestinal structure, increase stress tolerance as well as modulate innate and adaptive immune responses. Fishes fed ADDNucleo supplemented diets generally have shown enhanced resistance to viral, bacterial and parasitic infection's.

### What is ADDNucleo Fish ?

ADDNucleo Fish is a concentrated balanced free nucleotides and active precursors, obtained from yeast.

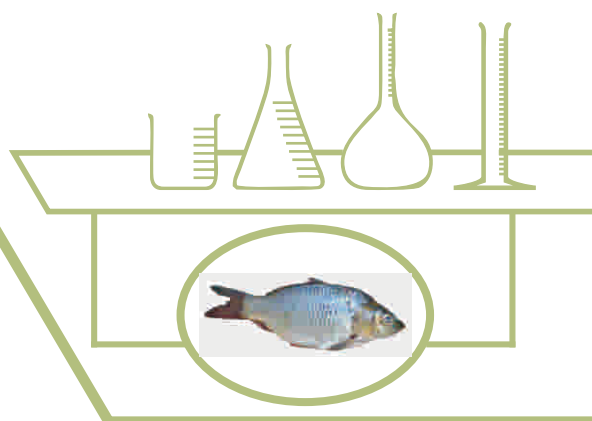
### Main Effects on Shrimps, Prawns and other fishes :

- Improves immune system development and intestinal development.
- Low mortality rate.
- Higher immune power.
- Less variability.
- Better vaccine response.

The information and data contained herein has been compiled based on information we believe reliable. Users should thoroughly test all applications and independently conclude satisfactory performance before commercializations, as these recommendations are non-binding. User's assume all liabilities for use of the Products. We are not liable for any advice which we may have failed to give.

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### What is the use of ADDNucleo Fish in Aquatic feeds ?

The carefully selected blend, ADDNucleo Fish is formulated to meet the specific needs of fish, helping the optimal development of the immune system and digestive system. ADDNucleo drastically lowers the intestinal inflammatory response in diets with high inclusion of plant based feed components, helping to enhance the digestibility of the diet and improving gut health of animals. ADDNucleo has also shown to increase resistance to challenge infections with bacterial, viral and rickettsial diseases as well as ectoparasitic infestation.

Nucleotides are particularly necessary for the development of tissues with a high cell replication rate such as immune and intestinal tissues. So the ADDNucleo Fish incorporation in the diet helps get animals more resistant to disease and stress. They play an important role in situations where the novo or endogenous synthesis alone does not completely satisfy their needs.

Our product development team has designed specific ADDNucleo product for different species. Apart from the disease resistance and stress ADDNucleo increases the development of intestinal mucosa and the immune system.

### Appearance :

**ADDNucleo** comes in white to off-white colour powder with characteristic taste and aroma.

### Dosage :

The recommended dose is 500 g to 1kg per ton of feed.

### Shelf Life :

Two years from the date of manufacture.

### Packaging :

1 kg Aluminium Pouch.



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