TIANJIN HUGE ROC ENTERPRISES CO., LTD.
1806, HUIJING CENTRE, 65 DAGU BEILU, TIANJIN CHINA 300041

HR Green Antibacterial Peptide Feed Additive

Product Brochure

1. Product Introduction

HR is a green, antibiotic-free, high-safety antibacterial feed additive specially developed for livestock and poultry breeding. Its core active ingredient is biologically fermented antibacterial peptide, with a stable effective component content of 10%.

Breaking the drawbacks of traditional antibiotics, this product features targeted bactericidal effect, intracellular bacteria elimination and gastrointestinal degradation resistance. It can fully replace feed antibiotics, suitable for full-cycle breeding of chickens, ducks and pigs, and fully meets the new standards of antibiotic-free breeding and food safety.

Free of drug resistance and drug residues, and harmless to livestock and poultry bodies, it integrates disease prevention, intestinal regulation and growth promotion. It is the preferred core product for large-scale farms to replace antibiotics, reduce disease incidence and improve economic benefits.

2. Target Pathogens & Solvable Breeding Problems

It can efficiently inhibit 5 high-incidence pathogenic bacteria in breeding, fundamentally reduce intestinal diseases and bacterial infections of livestock and poultry:

1. *Escherichia coli K88*: Prevent piglet yellow/white scour, watery diarrhea and feed intake decline of livestock and poultry
2. *Staphylococcus aureus*: Relieve body surface inflammation and intestinal infection, reduce skin and mucous membrane lesions
3. *Salmonella*: Block salmonella infection in poultry, reduce chick mortality, cut bacterial load in organs and eliminate food safety hazards
4. *Clostridium welchii*: Treat necrotic enteritis, intestinal flatulence and enterotoxic syndrome, improve intractable diarrhea
5. *Riemerella anatipestifer*: Special prevention and control of duck serositis, reduce lameness, death and culling rate of duck flocks

3. Five Core Advantages for Breeding

3.1 Faster & Stronger Bactericidal Effect

Its antibacterial activity surpasses common veterinary antibiotics such as ampicillin and ceftiofur. It can kill intestinal pathogenic bacteria completely within 2 hours. With unique intracellular bactericidal capacity, it eliminates latent bacteria hidden in intestinal and immune cells of livestock and poultry, greatly lowering disease recurrence and solving the "temporary relief only" defect of ordinary products.

3.2 No Drug Resistance, Available for Long-Term Whole-Cycle Use

Different from traditional antibiotics, long-term continuous use will not induce

bacterial drug resistance, and the antibacterial effect will not decline. No drug rotation or drug withdrawal interval is required, suitable for regular health care in the whole breeding cycle.

3.3 Resist Digestion, Stable & Long-Lasting Effect

It resists degradation by gastric acid and intestinal trypsin, maintains high activity in both strong acid gastric juice and weak alkaline intestinal juice of livestock and poultry, reaches intestinal lesions smoothly and exerts stable antibacterial and intestinal protection effects.

3.4 High Temperature & Storage Resistance, Fit for Large-Scale Feed Production

Adaptable to high-temperature feed pelleting process: over 90% activity retained after pelleting at 120℃. When sealed and stored at normal temperature for 6 months under 60% humidity, its antibacterial activity remains stable without deterioration, bringing no pressure to storage and feed processing.

3.5 Zero Residue & High Safety, No Risk Before Slaughter

Pure biological polypeptide ingredient with low toxicity to livestock and poultry bodies. It will not damage animal cells, liver, kidney and intestinal mucosa under effective antibacterial concentration. No drug residues detected in meat and organs 24 hours after withdrawal, fully complying with pollution-free breeding and livestock slaughter inspection standards, and avoiding penalties for drug residues.

4. Core Breeding Functions

- Replace antibiotics: Fully substitute chlortetracycline, bacitracin zinc and other feed antibiotics to realize real antibiotic-free breeding
- Stop diarrhea & protect intestine: Rapidly improve watery stool, feed-like stool and intestinal flatulence, repair damaged intestinal mucosa
- Reduce mortality: The survival rate of salmonella-infected chicks can reach 98%, sharply cut disease-induced death and culling loss
- Boost growth performance: Purify intestinal harmful bacteria, optimize flora balance, improve feed digestibility, lower feed-meat ratio and shorten breeding cycle
- Prevent waterfowl diseases: Targeted control of duck serositis, reduce lameness, cough and death of duck groups
- Lower secondary infection risk: Regulate intestinal mucosal immunity, enhance natural disease resistance of livestock and poultry

5. Universal Usage Scheme (Suitable for Chickens, Ducks & Pigs)

5.1 Mixed Feed Application (Mainstream Method)

- Daily health care & prevention: Add 100–200g per ton of feed, mix evenly for long-term use to suppress bacteria and protect intestines regularly
- High-incidence period or disease outbreak: Add 300–400g per ton of feed, use continuously for 5–7 days to rapidly control diarrhea and bacterial infection

5.2 Drinking Water Application (Emergency Conditioning)

Add 1–2kg HR per ton of clean water, concentrate drinking once a day for 5–7 consecutive days, suitable for emergency conditioning of sudden diarrhea, depression and intestinal discomfort.

6. Popularized Working Mechanism

1. Targeted sterilization: Antibacterial peptides accurately adsorb and destroy bacterial cell membranes to kill harmful bacteria rapidly, without damaging normal cells of livestock and poultry, mild and safe

2. Deep bacteria clearance: Penetrate intestinal cells of livestock and poultry to remove latent intracellular bacteria, cut off infection sources and prevent repeated disease attacks

3. Intestinal balancing & immunity boosting: Balance beneficial intestinal flora, repair damaged intestinal mucosa, improve nutrient absorption and immunity to realize dual effects of disease prevention and growth promotion

7. Advantage Comparison with Traditional Antibiotics

Comparison Item	HR Antibacterial Peptide	Traditional Feed Antibiotics
Drug Resistance	No drug resistance, long-term continuous application available	Easy to induce drug resistance, decreasing efficacy year by year
Bactericidal Speed	Quick sterilization within 2 hours, eliminate intracellular latent bacteria	Slow sterilization (8–12 hours), unable to remove intracellular bacteria
Drug Residue	Zero residue after 24h withdrawal, safe for slaughter	Long residue cycle, high risk of unqualified sampling inspection
Intestinal Adaptability	Resist acid & digestive enzymes, stable intestinal activity	Easy to be degraded by digestive juice, unstable efficacy
Body Safety	Non-irritant, no damage to liver, kidney and intestine	High dosage may injure viscera and intestinal tract of animals

8. Precautions for Use

1. Strong compatibility: Can be mixed with conventional feed, vitamins, probiotics and other products without antagonistic reaction

2. Mix feed and drinking water thoroughly to ensure uniform intake and stable efficacy

3. Store in sealed, dry, cool and ventilated place; avoid direct sunlight and damp environment to prevent caking

4. No mandatory withdrawal period; available for whole-cycle regular health care without drug stop before slaughter