

ER BAC[®] PLUS

Pfizer Animal Health

Erysipelothrix Rhusiopathiae Bacterin

DESCRIPTION

ER BAC[®] Plus is a liquid, serum-free, clarified bacterin that has been chemically inactivated and combined with the adjuvant Amphigen[®] to enhance the immune response.

INDICATIONS

ER BAC[®] Plus is for vaccination of healthy swine 3 weeks of age or older as an aid in preventing disease caused by *Erysipelothrix rhusiopathiae* for a period of 20 weeks following the second dose in the vaccination regimen.

DIRECTIONS

1. General Directions: Shake well. Aseptically administer 2 mL intramuscularly.
2. Primary Vaccination: Healthy swine 3 weeks of age or older should receive two 2 mL doses administered 3-4 weeks apart.
3. Revaccination: Semiannual revaccination with single dose is recommended.
4. Good animal husbandry and herd health management practices should be employed.

PRECAUTIONS

Store at 2°-7°C. Prolonged exposure to higher temperatures may adversely affect potency. Do not freeze.

Use entire contents when first opened.

Sterilized syringes and needles should be used to administer this vaccine.

As with many vaccines, anaphylaxis may occur after use. Initial antidote of epinephrine is recommended and should be followed with appropriate supportive therapy.

This product has been shown to be efficacious in healthy animals. A protective immune response may not be elicited if animals are incubating an infectious disease, are malnourished or parasitized, are stressed due to shipment or environmental conditions, are otherwise immunocompromised, or the vaccine is not administered in accordance with label directions.

For use in swine only.
For veterinary use only.

Do not vaccinate within 21 days before slaughter.

Technical inquiries should be directed to Pfizer Animal Health Veterinary Services, (800) 366-5288 (USA), (800) 461-0917 (Canada).

EFFECTIVENESS

In laboratory and field safety studies of ER BAC[®] Plus, no serious adverse reactions to vaccination were reported. Efficacy of ER BAC[®] Plus was demonstrated in 2 host animal studies conducted by Pfizer Animal Health; an immunogenicity study and a duration-of-immunity study demonstrating efficacy 20 weeks after second vaccination. Pigs vaccinated with ER BAC[®] Plus, followed by challenge, had significantly fewer clinical signs of disease, including death, lesions, and fever, than nonvaccinated control pigs in both of the following studies. Host animal immunogenicity study: The purpose of this study was to demonstrate protection against challenge with virulent *E. rhusiopathiae* 21/2 weeks after the second vaccination. Pigs were vaccinated at approximately 3 and 6 weeks of age. Pigs were monitored daily for rectal temperature and for clinical signs of disease. Ten of 10 control pigs (100%) were determined to be positive for infection after challenge. Nineteen of 20 vaccinated pigs (95%) were protected. These results indicate that vaccination with ER BAC[®] Plus with Amphigen[®] provided significant protection from challenge 21/2 weeks after vaccination. (Tables 1 and 2).

Table 1. Results of *E. rhusiopathiae* Challenge in Control Pigs (100% positive).

Control Pigs	2 days*	1 day only	Clinical signs**	Mortality/ Euthanasia	Treated	Organism isolation
10	7	3	8	3	7	3

* Elevation in rectal temperature above 40.9°C (105.6°F) on 2 consecutive days.

** Clinical signs included recumbent, depressed, and/or metastatic skin lesions.

Table 2. Results of *E. rhusiopathiae* Challenge 21/2 Weeks Postvaccination (95% protected).

Vaccinated Pigs	2 days*	1 day only	Clinical signs**	Mortality/ Euthanasia	Treated	Organism isolation
20	1	0	0	0	1	Not Sampled

* Elevation in rectal temperature above 40.3°C (104.6°F) on 2 consecutive days.

** Clinical signs included recumbent, depressed, and/or metastatic skin lesions.

Duration-of-immunity study: The purpose of this study was to demonstrate protection against challenge with virulent *E. rhusiopathiae* in a duration-of-immunity study 20 weeks after the second vaccination or at approximately market weight (26 weeks of age). Pigs were vaccinated at approximately 3 and 6 weeks of age. Pigs were monitored daily for rectal temperature and for clinical signs of disease. Nine of 10 control pigs (90%) were determined to be positive for infection after challenge. Fifteen of

20 vaccinated pigs (75%) were protected. These results indicate that vaccination with ER BAC[®] Plus with Amphigen[®] provided significant protection from challenge 20 weeks after vaccination. (Tables 3 and 4).

Table 3. Results of *E. rhusiopathiae* Challenge in Control Pigs (90% positive).

Control Pigs	2 days*	1 day only	Clinical signs**	Mortality/ Euthanasia	Treated	Organism isolation
10	3	4	9	7	3	5

* Elevation in rectal temperature above 40.9°C (105.6°F) on 2 consecutive days.

** Clinical signs included recumbent, depressed, and/or metastatic skin lesions.

Table 4. Results of *E. rhusiopathiae* Challenge in 26-week-old Pigs (75% protected).

Vaccinated Pigs	2 days*	1 day only	Clinical signs**	Mortality/ Euthanasia	Treated	Organism isolation
20	3	5	5	1	4	1

* Elevation in rectal temperature above 40.3°C (104.6°F) on 2 consecutive days.

** Clinical signs included recumbent, depressed, and/or metastatic skin lesions.