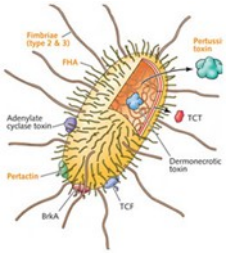
ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Bordetella bronchiseptica proteins

Cat # BBV15-N-100 Bordetella bronchiseptica proteins (inactivated vaccine for dog) for ELISA **SIZE**: 100 ug

Bordetella bronchiseptica (Bb) is a small, Gram-negative, rod-shaped bacterium of the genus Bordetella. It can cause infectious bronchitis in dogs and other mammals (**pig, cat, dog, rabbit, horse**, and seals etc), but rarely infects humans. Examples of diseases caused by B. bronchiseptica include atrophic rhinitis in swine, kennel cough in dogs, and snuffles in rabbits. Bordetella bronchiseptica is closely related to B. pertussis—the obligate human pathogen that causes pertussis (whooping cough).



Several antigenic proteins have been identified in B. bronchiseptica that induce antibodies during infection: amino acid ATP-binding cassette transporter substrate-binding protein (**ABC**), lipoprotein (**PL**), outer membrane porin protein (**PPP**), leu/ile/val-binding protein (**BPP**), pertactin (**PRN**), Filamentous hemagglutinin (FHA) and conserved hypothetical protein (**CHP**). **Pertactin** (PRN or p69 protein) is a highly immunogenic virulence factor of Bb. Specifically, it is an outer membrane protein that promotes adhesion to tracheal epithelial cells. Some of these proteins have been tested for a safe subunit vaccine for B. bronchiseptica.

Bb has been recognized as a pathogen in Canine Infectious Respiratory Disease (CIRD) since the early 1900s. Several vaccines (heat killed or formalin or glutaraldehyde inactivated) are in use in animals. Some vaccines are available as a combination with other vaccines. **Bronchi-Shield III** (Canine Adenovirus Type 2-Para influenza-Bordetella Bronchiseptica Vaccine, Boehringer Ingelheim); **Bordetella Bronchiseptica Vaccine** (MVP Labs, Avirulent Live Culture). **Nasaguard B vaccines** (Pfizer, attenuated *Bb* IN).. Vaccines are either given by oral or intranasal or injectable routes.

Source of Antigens/Proteins

Whole antigens extract from B. bronchiseptica are prepared using proprietary technique. The B. bronchiseptica antigens are being used for vaccination of cats and dogs. The proteins are supplied in PBS, pH 7.4 with no preservatives. lot specific concn on the vials. The stock solution must be frozen in suitable aliquots and kept at –20oC for storage. Suitable bacteriostatic agents (azide or merthiolate may be added as desired.

Stability: 6-12 months at –20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Purified proteins may be used for coating or as ELISA control, or Western Blotting.

References

Eries K et al (2004) Journal of Clinical Microbiology 42.10 (2004): 4524-4529; Greene CE et al (2011) Greene Infectious diseases of the dog and cat 4th ed. Ed. Craig E. Greene. St Louis, Missouri: Elsevier Saunders, 2011, 55-62; Mattoo S et al (2001) Front Biosci. 6: E168–86; Wagener JSR et al 91984) Am J Vet Res 45(9): 1862-6; Burns EH (1993) J Clin Microbiol 31(7): 1838-44

*This product is for in vitro research use only.

Related Items

Catalog#	Description
AE-312100-1	Rabbit Anti-Bordetella bronchiseptica pertactin (PRN) IgG ELISA Kit
AE-312200-1	Cow/Bovine Anti-Bordetella bronchiseptica pertactin (PRN) IgG ELISA Kit
AE-312300-1	Pig/Swine Anti-Bordetella bronchiseptica pertactin (PRN) IgG ELISA Kit
AE-312310-1	Pig/Swine Anti-Bordetella bronchiseptica pertactin (PRN) IgM ELISA Kit
AE-312320-1	Pig/Swine Anti-Bordetella bronchiseptica pertactin (PRN) IgA ELISA Kit
AE-312400-1	Dog/Canine Anti-Bordetella bronchiseptica pertactin (PRN) IgG ELISA Kit
AE-312410-1	Dog/Canine Anti-Bordetella bronchiseptica pertactin (PRN) IgM ELISA Kit
AE-312420-1	Dog/Canine Anti-Bordetella bronchiseptica pertactin (PRN) IgA ELISA Kit
AE-312500-1	Cat/Feline Anti-Bordetella bronchiseptica pertactin (PRN) IgG ELISA Kit
BBV11-S	Rabbit Anti-Bordetella bronchiseptica vaccine antiserum
BBV15-N-100	Bordetella bronchiseptica proteins (inactivated vaccine for dog) for ELISA
PTOX41-M	Monoclonal Anti-B. pertussis/B.bronchiseptica Lipopolysaccharide (LPS/Los-A) IgG unlabeled

BBV15-N-100-B-bronchiseptica-antigens 170320A

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com