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(54) Title: GENES AND PROTEINS OF BRACHYSPIRA HYODYSENTERIAE AND USES THEREOF

(57) Abstract: Novel polynucleotide and amino acids of *Brachyspira hyodysenteriae* are described. These sequences are useful for diagnosis of *B. hyodysenteriae* disease in animals and as a therapeutic treatment or prophylactic treatment of *B. hyodysenteriae* disease in animals. These sequences may also be useful for diagnostic and/or prophylactic treatment of diseases in animals caused by other *Brachyspira* species, including *B. intermedia*, *B. suantatina*, *B. alvinipulli*, *B. aalborgi*, *B. innocens*, *B. murdochii*, and *B. pilosicoli*.



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