## CLAIMS

We claim:

1. A parvovirus vaccine comprising one or more of

SEQ ID NO: 2 or a portion of SEQ ID NO: 2 that encodes an antigenic region; and

SEQ ID NO: 4 or a portion of SEQ ID NO: 4 that encodes an antigenic region.

2. The parvovirus vaccine of claim 1 further comprising nucleic acid sequences selected from the group consisting of: SEQ ID NO: 1, a portion of SEQ ID NO: 1 that encodes an antigenic region, SEQ ID NO: 3, a portion of SEQ ID NO: 3 that encodes an antigenic region, and sequences encoding a type VP-2b protein.

3. The parvovirus vaccine of claim 1, wherein said SEQ ID NO: 2 or said portion of SEQ ID NO: 2 and said SEQ ID NO: 4 or said portion of SEQ ID NO: 4 are present in an attenuated parvovirus.

4. A method of vaccinating an animal against parvovirus infection, comprising the step of

administering to said animal a parvovirus vaccine comprising

SEQ ID NO: 2 or a portion of SEQ ID NO: 2 that encodes an antigenic region; and

SEQ ID NO: 4 or a portion of SEQ ID NO: 4 that encodes an antigenic region.

5. The method of claim 4, wherein said parvovirus vaccine further comprises nucleic acid sequences selected from the group consisting of: SEQ ID NO: 1, a portion of SEQ ID NO: 1 that encodes an antigenic region, SEQ ID NO: 3, a portion of SEQ ID NO: 3 that encodes an antigenic region, and sequences encoding a type VP-2b protein.

6. The method of claim 4, wherein said wherein said SEQ ID NO: 2 or said portion of SEQ ID NO: 2 and said SEQ ID NO: 4 or said portion of SEQ ID NO: 4 are present in an attenuated parvovirus.

7. A method of detecting the presence of CPV in a biological sample, comprising exposing said sample to molecules that specifically or selectively bind to

a) one or more of nucleic acid sequences SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3 and SEQ ID NO: 4;

or

b) amino acid sequences encoded by one or more of nucleic acid sequences SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3 and SEQ ID NO: 4

and

detecting a binding event between said molecules and said one or more nucleic acid sequences or said one or more amino acid sequences.

8. The method of claim 7, wherein said molecules are oligonucleotide primers

9. The method of claim 7, wherein said molecules are antibodies.

10. A diagnostic kit, comprising

molecules specific for detecting

a) one or more of nucleic acid sequences SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3 and SEQ ID NO: 4;

or

b) amino acid sequences encoded by one or more of nucleic acid sequences SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3 and SEQ ID NO: 4

11. The diagnostic kit of claim 10, wherein said molecules are oligonucleotide primers.

We claim:

**1**. A canine immunogenic composition comprising parvovirus virions that have a type VP-2 protein, said parvovirus virions comprising a nucleic acid, said nucleic acid comprising the nucleotide sequence selected from the group consisting of:

SEQ ID NO: 2;

a sequence that is at least 95% homologous to SEQ ID NO: 2 wherein nucleotides 16-18 are CTG to encode Leu at position 431 of said VP-2 protein;

SEQ ID NO: 4; and

a sequence that is at least 95% homologous to SEQ ID NO: 4 wherein nucleotides 43-45are GCA to encode Ala at position 440 of said VP-2 protein.

**2**. The canine immunogenic composition of claim **1** further comprising virions comprising a nucleic acid sequence selected from the group consisting of:

SEQ ID NO: 1;

a portion of SEQ ID NO: 1 that encodes an antigenic region of said VP-2 protein;

SEQ ID NO: 3; and

a portion of SEQ ID NO: 3 that encodes an antigenic region of said VP-2 protein; and

sequences encoding a type VP-2b protein.

**3**. The canine immunogenic composition of claim **1**, wherein said parvovirus virions are attenuated.

**4**. The canine immunogenic composition of claim **2**, wherein said parvovirus virions are attenuated.

**5**. A diagnostic kit for detecting parvovirus in domestic dogs and puppies, wild canids, wolves, wild dogs, domestic cats and kittens, wild cats, minks, red pandas, foxes, lions, tigers, animals in zoos or protected areas, and animals in research facilities, comprising

hybridizable nucleic acids specific for detecting, in domestic dogs and puppies, wild canids, wolves, wild dogs, domestic cats and kittens, wild cats, minks, red pandas,

foxes, lions, tigers, animals in zoos or protected areas, and animals in research facilities, a nucleic acid sequence selected from the group consisting of:

a sequence that is at least 95% homologous to SEQ ID NO: 2 wherein nucleotides 16-18are CTG to encode Leu at position 431 of a VP-2 protein; and

a sequence that is at least 95% homologous to SEQ ID NO: 4 wherein nucleotides 43-45are GCA to encode Ala at position 440 of a VP-2 protein.

**6**. The diagnostic kit of claim **5**, wherein said hybridizable nucleic acids are oligonucleotide primers.

**7**. The diagnostic kit of claim **5**, further comprising hybridizable nucleic acids specific for detecting

a) one or more of nucleic acid sequences selected from the group consisting of SEQ ID NO: 1 and SEQ ID NO: 3; or

b) amino acid sequences encoded by one or more of nucleic acid sequences selected from the group consisting of SEQ ID NO:1, SEQ ID NO: 2 and SEQ ID NO: 3.

**8**. The canine immunogenic composition of claim **1**, wherein said nucleotide sequence is SEQ ID NO: 2.

**9**. The canine immunogenic composition of claim **1**, wherein said nucleotide sequence is SEQ ID NO: 4.

**10**. The canine immunogenic composition of claim **1**, wherein said sequence that is at least 95% homologous to SEQ ID NO: 2 is 99% homologous to SEQ ID NO: 2.

**11**. The canine immunogenic composition of claim **1**, wherein said sequence that is at least 95% homologous to SEQ ID NO: 4 is 99% homologous to SEQ ID NO: 4.

**12**. The diagnostic kit of claim **5**, wherein said sequence that is at least 95% homologous to SEQ ID NO:2 is SEQ ID NO: 2.

**13**. The diagnostic kit of claim **5**, wherein said sequence that is at least 95% homologous to SEQ ID NO:4 is SEQ ID NO: 4.