What is claimed is:

1. An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises heavy chain complementarity determining region (CDR) 1, CDR2 and CDR3 and light chain CDR1, CDR2 and CDR3, wherein the heavy chain CDR1, CDR2 and CDR3 comprise the amino acid sequences of SEQ ID NOS:431, 433 and 435, respectively.

2. A recombinant expression vector comprising the nucleic acid molecule of claim 1.

3. An isolated host cell comprising the expression vector of claim 1 An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises heavy chain complementarity determining region CDR1, CDR2 and CDR3 and light chain CDR1, CDR2 and CDR3, wherein the heavy chain CDR1, CDR2 and CDR3 comprise the amino acid sequences of SEQ ID NOS: 431, 433 and 435, respectively, and the light chain CDR1, CDR2 and CDR3 comprise the amino acid sequences of SEQ ID NOS: 439, 441 and 443, respectively.

4. The nucleic acid molecule of claim 1, wherein the antibody or antibody fragment comprises a heavy chain variable region (HCVR) comprising the amino acid sequence of SEQ ID NO:429 or 901.

5. The nucleic acid molecule of claim 4 comprising the nucleotide sequence of SEQ ID NO:428 or 900, or a substantially similar sequence having at least 95% homology thereof.

6. The nucleic acid molecule of claim 1, wherein the antibody or antibody fragment comprises a light chain variable region (LCVR) comprising the amino acid sequence of SEQ ID NO:437 or 903.

7. The nucleic acid molecule of claim 6 comprising the nucleotide sequence of SEQ ID NO:436 or 902, or a substantially similar sequence having at least 95% homology thereof.

8. An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises a HCVR comprising the amino acid sequence of SEQ ID NO:901 and a LCVR comprising the amino acid sequence of SEQ ID NO:903.

9. The nucleic acid molecule of claim 8, wherein the HCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 900.

10. The nucleic acid molecule of claim 8, wherein the LCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 902.

11. The nucleic acid molecule of claim 8 comprising the nucleotide sequences of SEQ ID NOS:900 and 902.

12. A method of producing an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), comprising growing the host cell of claim 3 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

13. A recombinant expression vector comprising the nucleic acid molecule of claim 8.

14. An isolated host cell comprising the expression vector of claim 13.

15. A method of producing an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), comprising growing the host cell of claim 14 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

16. A recombinant expression vector comprising the nucleic acid molecule of claim 11.

17. An isolated host cell comprising the expression vector of claim 16.

18. A method of producing an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), comprising growing the host cell of claim 17 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

19. An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises a HCVR comprising the amino acid sequence of SEQ ID NO:429 and a LCVR comprising the amino acid sequence of SEQ ID NO:437.

20. The nucleic acid molecule of claim 19, wherein the HCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 428.

21. The nucleic acid molecule of claim 19, wherein the LCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 436.

22. The nucleic acid molecule of claim 19 comprising the nucleotide sequences of SEQ ID NOS:428 and 436.

## CLAIMS

1. An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises heavy chain complementarity determining region (CDR) 1, CDR2 and CDR3 and light chain CDR1, CDR2 and CDR3, wherein the heavy chain CDR1, CDR2 and CDR3 comprise the amino acid sequences of SEQ ID NOS:431, 433 and 435, respectively.

2. A recombinant expression vector comprising the nucleic acid molecule of claim 1.

3. An isolated host cell comprising the expression vector of claim 1 An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises heavy chain complementarity determining region CDR1, CDR2 and CDR3 and light chain CDR1, CDR2 and CDR3, wherein the heavy chain CDR1, CDR2 and CDR3 comprise the amino acid sequences of SEQ ID NOS: 431, 433 and 435, respectively, and the light chain CDR1, CDR2 and CDR3 comprise the amino acid sequences of SEQ ID NOS: 439, 441 and 443, respectively.

4. The nucleic acid molecule of claim 1, wherein the antibody or antibody fragment comprises a heavy chain variable region (HCVR) comprising the amino acid sequence of SEQ ID NO:429 or 901.

5. The nucleic acid molecule of claim 4 comprising the nucleotide sequence of SEQ ID NO:428 or 900, or a substantially similar sequence having at least 95% homology thereof.

6. The nucleic acid molecule of claim 1, wherein the antibody or antibody fragment comprises a light chain variable region (LCVR) comprising the amino acid sequence of SEQ ID NO:437 or 903.

7. The nucleic acid molecule of claim 6 comprising the nucleotide sequence of SEQ ID NO:436 or 902, or a substantially similar sequence having at least 95% homology thereof.

8. An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises a HCVR comprising the amino acid sequence of SEQ ID NO:901 and a LCVR comprising the amino acid sequence of SEQ ID NO:903.

9. The nucleic acid molecule of claim 8, wherein the HCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 900.

10. The nucleic acid molecule of claim 8, wherein the LCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 902.

11. The nucleic acid molecule of claim 8 comprising the nucleotide sequences of SEQ ID NOS:900 and 902.

12. A method of producing an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), comprising growing the host cell of claim 3 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

13. A recombinant expression vector comprising the nucleic acid molecule of claim 8.

14. An isolated host cell comprising the expression vector of claim 13.

15. A method of producing an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), comprising growing the host cell of claim 14 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

16. A recombinant expression vector comprising the nucleic acid molecule of claim 11.

17. An isolated host cell comprising the expression vector of claim 16.

18. A method of producing an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), comprising growing the host cell of claim 17 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

19. An isolated nucleic acid molecule encoding an antibody or antibody fragment which specifically binds human delta-like ligand 4 (hDll4), wherein the antibody or antibody fragment comprises a HCVR comprising the amino acid sequence of SEQ ID NO:429 and a LCVR comprising the amino acid sequence of SEQ ID NO:437.

20. The nucleic acid molecule of claim 19, wherein the HCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 428.

21. The nucleic acid molecule of claim 19, wherein the LCVR is encoded by a nucleotide sequence comprising SEQ ID NO: 436.

22. The nucleic acid molecule of claim 19 comprising the nucleotide sequences of SEQ ID NOS:428 and 436.