

CLAIMS

1. An anti-human NGF antibody Fab fragment selected from a group consisting of (a) and (b) below:

(a) an anti-human NGF antibody Fab fragment comprising a heavy-chain fragment consisting of the amino acid sequence shown by SEQ ID NO: 5 and a light-chain consisting of the amino acid sequence shown by SEQ ID NO: 8; and,

(b) an anti-human NGF antibody Fab fragment, comprising a heavy-chain fragment consisting of the amino acid sequence of SEQ ID NO: 5 where a glutamine at amino acid position 1 of SEQ ID NO:5 is modified to a pyroglutamic acid, and a light-chain fragment consisting of the amino acid sequence of SEQ ID NO:8.

2. An expression vector selected from a group consisting of (a) and (b) shown below:

(a) an expression vector comprising a polynucleotide comprising a base sequence encoding the heavy-chain fragment of the anti-human NGF antibody Fab fragment according to claim 1, and a polynucleotide comprising a base sequence encoding the light-chain of said anti-human NGF antibody Fab fragment; and

(b) an expression vector comprising a polynucleotide comprising a base sequence encoding the heavy-chain fragment of the anti-human NGF antibody Fab fragment according to claim 1.

3. A host cell transformed with the expression vector according to claim 2.

4. The host cell according to claim 3 selected from a group consisting of (a) and (b) shown below:

(a) a host cell transformed with an expression vector comprising a polynucleotide comprising a base sequence encoding the heavy-chain fragment and the light-chain of the anti-human NGF antibody Fab fragment according to claim 1; and

(b) a host cell transformed with an expression vector comprising a polynucleotide comprising a base sequence encoding the heavy-chain fragment of the anti-human NGF antibody Fab fragment according to claim 1, and with an expression vector comprising a polynucleotide comprising a base sequence encoding the light-chain of the said anti-human NGF antibody Fab fragment.

5. A method for producing an anti-human NGF antibody Fab fragment, comprising culturing the host cell according to claim 4 to express an anti-human NGF antibody Fab fragment.
6. A pharmaceutical composition comprising the anti-human NGF antibody Fab fragment according to claim 1, and a pharmaceutically acceptable carrier.
7. The pharmaceutical composition according to claim 6 for use in the treatment of postoperative pain.
8. Use of the anti-human NGF antibody Fab fragment according to claim 1 or 5, in the manufacture of a local pharmaceutical composition for the treatment of postoperative pain.