Claims

1. A humanized anti-TrkA antibody or fragment thereof that binds to human TrkA comprising one of the following combination of heavy and light chain variable domain comprising the sequences selected from the group consisting of SEQ ID NO: 1 and SEQ ID NO: 6, SEQ ID NO: 3 and SEQ ID NO: 6, SEQ ID NO: 3 and SEQ ID NO: 8, SEQ ID NO: 5 and SEQ ID NO: 6, and SEQ ID NO: 5 and SEQ ID NO: 8
wherein the non-CDR region of the heavy chain variable domain comprise an amino acid substitution at an amino acid position selected from the group consisting of V37A or K3Q and V37A
, wherein the amino acid position of each group member is indicated utilizing the numbering system set forth in Kabat.
2. The humanized anti-TrkA antibody or fragment thereof of claim 1, wherein the amino acid substitution of the non-CDR region of the heavy chain variable domain of the antibody or the fragment thereof comprises V37A or K3Q and V37A, wherein the amino acid position is indicated utilizing the numbering system set forth in Kabat.
3. A humanized anti-TrkA antibody or fragment thereof of claim 1 or 2 comprising:
a) a heavy chain variable domain comprising a sequence selected from the group consisting of SEQ ID NOs: 31-34, 36, 48-49, and
b) a light chain variable domain comprising a sequence selected from the group consisting of SEQ ID NOs: 6 and 8.
4. The humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 3, further comprising heavy and/or light constant regions and a hinge region, wherein the heavy constant region and the hinge region are of human IGHG1 isotype or are of human IGHG4 isotype, in particular heavy constant region and the hinge region are of human IGHG4 isotype wherein the hinge region comprises amino acid substitution S228P, wherein the amino acid position is indicated utilizing the EU numbering system.
5. The humanized anti-TrkA antibody or fragment thereof of any one of claim 1 to 4 comprising:
a) a heavy chain comprising a sequence selected from the group consisting of SEQ ID

NOs: 50-54, 56, 57, 69 and 70 and

b) a light chain comprising a sequence selected from the group consisting of SEQ ID NOs: 29 and 30.

6. The humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 5, wherein the antibody is a full length antibody or wherein
the antibody is an antibody fragment selected from the group consisting of Fab, Fab', Fab'-SH, Fd, Fv, dAb, $F(ab')_2$, scFv, bispecific single chain Fv dimers, diabodies, triabodies and scFv genetically fused to the same or a different antibody.

7. The humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 6, wherein the humanized anti-TrkA antibody or fragment thereof is capable of inhibiting the functional activation of TrkA.

8. The humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 7, wherein the humanized anti-TrkA antibody or fragment thereof binds to human TrkA with an affinity (KD) of 500 nM or less.

9. The humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 8, wherein the humanized anti-TrkA antibody or fragment thereof has at least equivalent or lower IC50 in a TF-1 cell proliferation assay than the corresponding parental murine antibody.

10. The humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 9, wherein the humanized anti-TrkA antibody has a FAB fragment thermostability temperature greater than 65°C which is equivalent to the FAB fragment thermostability temperature of the parental murine antibody.

11. A composition comprising the humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 10 and a pharmaceutically acceptable carrier.

12. The composition of claim 11 further comprising another pharmaceutically active agent wherein the said another pharmaceutically active agent is one or more of:

a) an analgesic agent

b) another anti-TrkA antibody

c) NGF

d) an anti-cancer agent

e) an anti-NGF antibody.

13. An article of manufacture comprising the humanized anti-TrkA antibody or fragment thereof of any one of claims 1 to 10 or the composition of claim 11 and 12.