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(71) Applicant *(for all designated States except US)*: BIOGEN, INC. [US/US]; 14 Cambridge Center, Cambridge, MA 02142 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: SANICOLA-NADEL, Michele [US/US]; 4 Maple Road, Winchester, MA 01890 (US). HESSION, Catherine [US/US]; 35 Otis Hill Road, Hingham, MA 02043 (US). CATE, Richard, L. [US/US]; 64 Arrowhead Road, Weston, MA 02193 (US).

(74) Agent: LEVINE, Leslie, M.; Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142 (US).

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(54) Title: RET LIGAND (RetL) FOR STIMULATING NEURAL AND RENAL GROWTH

(57) Abstract

This invention relates to nucleotide sequences which encode a Ret ligant (RetL9, as well as to methods of stimulating neural and renal growth by treating cells and mammalian subjects with RetL DNA or protein. The invention provides a purified and isolated DNA molecule coding for a RetL, having the nucleotide sequence of any RetL, but specifically including rat retL 1 cDNA (SEQ ID NO.1), partial human RetL1 cDNA (SEQ ID NO:8), full length human retL 1 cDNA (SEQ ID NO:10), human retL2 cDNA (SEQ ID NO:12), murine retL3 cDNA (SEQ ID NO:12) or human retL3 cDNA (SEQ ID NO;16), partial human retL3 cDNA (SEQ ID NO:18) or human retL3 cDNA (SEQ ID NO:20). The invention further provides a RetL protein, with an amino acid sequence comprising that of rat RetL1 (SEQ ID NO:2), partial human RetL1 (SEQ ID NO:9), full length human RetL (SEQ ID NO:11), human RetL2 (SEQ ID NO:13), murine RetL3 (SEQ ID NO:17), partial human RetL3 (SEQ ID NO:19) or human RetL3 (SEQ ID NO:21).