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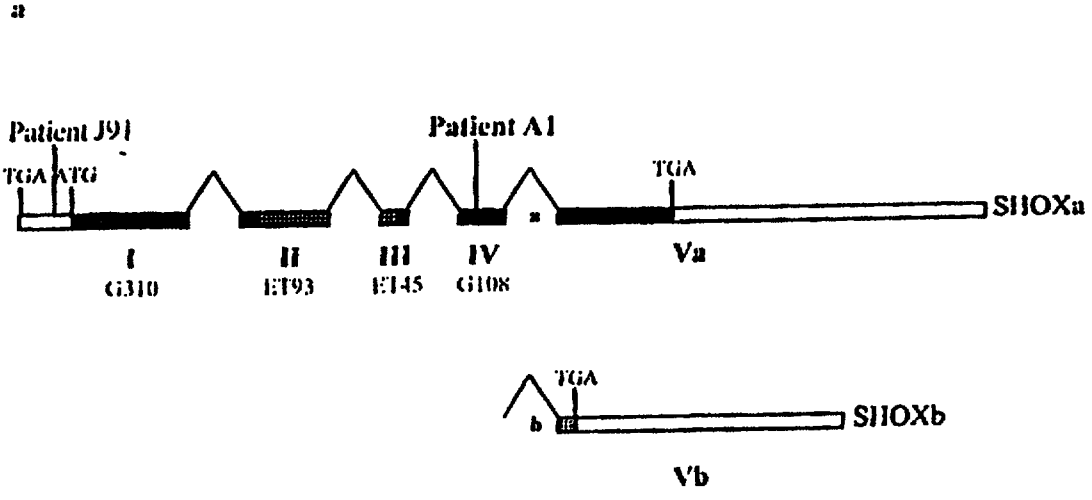
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(54) Title: HUMAN GROWTH GENE AND SHORT STATURE GENE REGION



(57) Abstract

Subject of the present invention is an isolated human nucleic acid molecule encoding polypeptides containing a homeobox domain of sixty amino acids having the amino acid sequence of SEQ ID NO:1 and having regulating activity on human growth. Three novel genes residing within the about 500 kb short stature critical region on the X and Y chromosome were identified. At least one of these genes is responsible for the short stature phenotype. The cDNA corresponding to this gene may be used in diagnostic tools, and to further characterize the molecular basis for the short stature–phenotype. In addition, the identification of the gene product of the gene provides new means and methods for the development of superior therapies for short stature.