

[0019] An embodiment of the present disclosure provides a recombinant

human 2Ig-B7-H3 protein coding gene, in which the gene is:

[0020] the nucleotide sequence shown in SEQ ID NO:1.

[0021] The recombinant human 2Ig-B7-H3 protein coding gene contains a total

of 2765 bases, and a base C/T heterozygous allele located at position 1488 at the 5'

end is site-replaced by T, so that the C and T bases at position 1488 each account for half of the position. As shown in the sequence listing, the "y" at position 1488 in SEQ ID NO:1 indicates that a C/T heterozygous allele occurs.

[0022] The present disclosure provides a human 2Ig-B7-H3 protein, the coding gene of the human 2Ig-B7-H3 protein is the recombinant human 2Ig-B7-H3 protein coding gene.

[0023] As well known in the art, among the 20 different amino acids that make up the protein, except for Met (ATG) or Trp (TGG) that is encoded by a single codon, the other 18 amino acids are encoded by 2 to 6 codons (Sambrook et al. Molecular Cloning: A Laboratory Manual. 2nd Ed., Cold Spring Harbor Laboratory, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y., 1989, see Appendix D on page 950). That is, due to the degeneracy of the genetic codons, the codons that determine an amino acid are often more than one, the replacement of the third nucleotide in the triplet codon often does not change the composition of the amino acid, so that the nucleotide sequence of the protein encoding the same amino acid sequence can be different. According to the well-known codon table, a person skilled in the art would start from the nucleotide sequence shown in SEQ ID NO:1 disclosed in the present

[0049] Example 1

[0050] Human 2Ig-B7-H3 protein coding gene

[0051] The recombinant human 2Ig-B7-H3 protein coding gene contains a total of 2765 bases, and a base C/T heterozygous allele located at position 1488 at the 5' end is site-replaced by T, so that the C and T bases at position 1488 each account for half of the position. The nucleotide sequence of the recombinant human 2Ig-B7-H3 protein coding gene is shown in SEQ ID NO:1. As shown in the sequence listing, the “y” at position 1488 in SEQ ID NO:1 indicates that a C/T heterozygous allele occurs.

[0052] Example 2

[0053] Construction of recombinant vector

[0054] The nucleotide sequence shown in SEQ ID NO: 1 in the sequence listing is inserted between the NEI and NotI restriction sites of pIRES2-EGFP vector, thereby obtaining the recombinant plasmid pIRES2-EGFP/2Ig-B7-H3.

[0055] 1. LipofectamineTM2000 cationic liposome transfection kit was used and operated according to the kit instructions, and the recombinant plasmid pIRES2-EGFP/2Ig-B7-H3 was introduced into 239T cells to obtain recombinant cells.

[0056] 2. The recombinant cells obtained in step 1 were inoculated into DMEM/F12 medium containing 5% (volume ratio) newborn calf serum, and then incubated in an incubator at 37°C and in 5% CO₂ for 48 hours, and then the supernatant was collected.