

## **DOUBLE-STRANDED OLIGONUCLEOTIDE AND CONJUGATE FOR INHIBITING EXPRESSION OF C3 GENES, AND USES THEREOF**

### **ABSTRACT**

The present application relates to the field of drugs, and in particular to a double-stranded oligonucleotide and conjugate for inhibiting the expression of C3 genes, and uses thereof. The double-stranded oligonucleotide or the conjugate comprising same can obviously inhibit the expression of C3 mRNA in HepG2 cells, can obviously inhibit the expression of C3 mRNA in animal bodies, can obviously reduce the level of C3 protein in the serum of *Macaca fascicularis*, the inhibition effect being able to last for 42 days, can obviously inhibit alternative complement pathways of the serum of *Macaca fascicularis*, but has no effect on classical complement pathways of the serum, can reduce the levels of C3 mRNA and protein of CFA-IgA mice, can reduce C3 deposition in a renal tissue, and can ameliorate the disease course of a patient with C3 deposition in the renal tissue. Additionally, no obvious abnormality is found in hematology and blood biochemistry of animals. The double-stranded oligonucleotide or the conjugate comprising same is beneficial to alleviating, preventing and/or treating diseases or disorders mediated by C3 genes.

Fig. 1