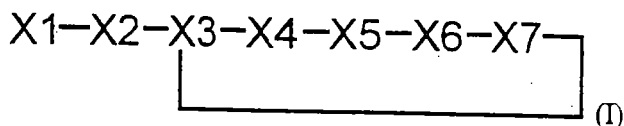




ABSTRACT

C5a Receptor Antagonists

The present invention is related to a compound, preferably a C5a receptor antagonist, having the following structure:



, whereby

X1 is a radical with a mass of about 1-300, whereby X1 is preferably selected from the group comprising R5-, R5-CO-, R5-N(R6)-CO-, R5-O-CO-, R5-SO₂-, R5-N(R6)-SO₂-, R5-N(R6)-, R5-N(R6)-CS-, R5-N(R6)-C(NH)-, R5-CS-, R5-P(O)OH-, R5-B(OH)-, R5-CH=N-O-CH₂-CO-, whereby R5 and R6 are individually and independently selected from the group comprising H, F, hydroxy, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, heterocyclyl, substituted heterocyclyl, arylalkyl, substituted arylalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, acyl, substituted acyl, alkoxy, alkoxyalkyl, substituted alkoxyalkyl, aryloxyalkyl and substituted aryloxyalkyl,

X2 is a radical that mimics the biological binding characteristics of a phenylalanine unit,

X3 and X4 are individually and independently a spacer, whereby the spacer is preferably selected from the group comprising amino acids, amino acid analogs and amino acid derivatives,

X5 is a radical that mimics the biological binding characteristics of a cyclohexylalanine or homoleucine unit,

X6 is a radical that mimics the biological binding characteristics of a tryptophane unit,

X7 is a radical that mimics the biological binding characteristics of a norleucine or phenylalanine unit,



a chemical bond is formed between X3 and X7, and

the connecting lines – in formula (I) represent chemical bonds, whereby the chemical bond is individually and independently selected from the group comprising covalent bonds, ionic bonds and coordinative bonds, whereby preferably the bond is a chemical bond and more preferably the chemical bond is a bond selected from the group comprising amide bonds, disulfide bonds, ether bonds, thioether bonds, oxime bonds and aminotriazine bonds.