Novel Modulators of Melanocortin Receptors

UA ID Technology #ua16-080

Title: Treatment for Depression and Other Mood Disorders

Invention: The technology describes a cyclic peptide modification that allows for antagonistic binding toward melanocortin 5 receptor (MC5R). Evidence links this receptor to depression and mood disorders, allowing the invention to effectively treat certain mental disorders.

Background: SHU9119 is a peptide chain that is known to interact with Melanocortin Receptors. The receptors themselves are a series of five receptors that are difficult to isolate for targeted drug therapy. The invention relates to a modified version of SHU9119 that can antagonize MC5R and render it inert to further chemical reactions. This allows rapidly acting therapy to target these receptors and relieve those suffering from depression and other mood disorders.

Applications:
• Pharmaceutical compound to treat depression and anxiety among other mood disorders which may be correlated with anomalous Melanocortin Receptor activation.

Advantages:
• Targets specific receptor to minimize undesirable side effects.
• May achieve therapeutic effect in less time than alternative pharmacological interventions.

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