Neuropeptide S (NPS) as a Treatment for Anxiety, Sleep Disorders, Attention Deficit Hyperactivity Disorder, Attention Deficit Disorder, and Asthma

Tech ID: 18857 / UC Case 2004-053-0

BACKGROUND

Patent "WO02/31145" discloses a newly deorphanized GPCR system, Neuropeptide S (NPS), the endogenous ligand, and its cognate GPCR. However this patent does not detail the pharmacological or physiological function of NPS and its GPCR. University of California, Irvine researchers have characterized NPS's function in the CNS.

TECHNOLOGY DESCRIPTION

University of California, Irvine researchers have shown that central administration of NPS increases locomotor activity in mice and decreases paradoxical (REM) sleep and slow wave sleep in rats. NPS was further shown to produce anxiolytic-like effects in mice exposed to different stressful paradigms.

APPLICATIONS

The NPS receptor may be used as a system to assay for agonists that are useful therapeutic agents in narcolepsy, hypersomnia or under conditions when elevated alertness is required. Antagonists to the NPS receptor may also be assayed for novel therapeutic approach to treat insomnia. NPS may also be used in the treatment or prevention of asthma and it also may be used as a therapeutic in Attention Deficit Hyperactivity Disorder (ADHD) and Attention Deficit Disorder (ADD).

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,012,407	04/21/2015	2004-053

CONTACT

Casie Kelly-Quintos
casie.kelly@uci.edu
tel: 949-824-2920.

OTHER INFORMATION

KEYWORDS

ADHD, Sleep disorders

CATEGORIZED AS

- **Medical**
  - Disease: Central Nervous System
  - Screening
  - Therapeutics
- **Research Tools**
  - Screening Assays

RELATED CASES

2004-053-0

UCI Beall
Applied Innovation

5270 California Avenue / Irvine,CA
92697-7700 / Tel: 949.824.2683