Non-human mutant mammals deficient in sigma receptors and their applications

The genome of the non-human mutant mammal, deficient in an endogenous Sigma receptor, contains a mutation that comprises a disruption in an endogenous Sigma receptor gene, wherein said gene disruption gives rise to a mutant lacking detectable levels of endogenous Sigma receptor. The mutant may be used as a control animal for in vivo tests, as well as a source of cells that can be used in in vitro tests. Mutants deficient in the Sigma-1 receptor can be used as models for in vivo study of disorders of the central nervous system, memory alterations, stress conditions and drug addictions, analgesia processes and neuroprotection. Mutants deficient in the Sigma-2 receptor can be used to study diagnostic or therapeutic tools to fight cancer and/or degenerative processes and/or to design compounds capable of preventing, reducing or alleviating the secondary pathology associated with administration of neuroleptic agents.
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The present search report has been drawn up for all claims

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Place of search: Munich
Date of completion of the search: 10 October 2007
Examiner: Page, Michael

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