

USGENE® on STN®



USGENE® covers all available peptide and nucleic acid sequences from the published applications and issued patents of the United States Patent and Trademark Office (USPTO). Sequence data are available within only 3 days of publication by the USPTO.

USGENE is the new unparalleled resource for

- Freedom-to-operate, prior-art, validity and infringement patent sequence searches
- Competitive analysis of organizations with biosequence patents
- Current-awareness alerts (SDIs) from the very latest USPTO sequence data

USGENE offers three sequence searching methods

- BLAST for advanced similarity searching based on NCBI BLAST® algorithm
- GETSIM for advanced similarity searching based on FASTA algorithm
- GETSEQ for simple fragment or motif sequence queries

Biosequences in USGENE

- Peptide and nucleic acid sequences from 1981 to date
- From all relevant USPTO published applications and issued patents
- Organism name, sequence length, and SEQ ID number
- Feature tables for modifications and other features
- Typically available within 3 days of publication by the USPTO

USGENE records also contain

- Original publication title, abstract and claims
- Patent assignees and full inventor names
- Publication, application and parent case WIPO/PCT numbers and dates
- Full-text links to the USPTO

The USPTO Genetic Sequence Database, USGENE®, is produced by the SequenceBase Corporation and provided on STN as file USGENE.

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L1 ANSWER 1 OF 1 USGENE COPYRIGHT 2013 SEQUENCEBASE CORP on STN
AN 8349567.2 1 Protein 2 USGENE
TI Cathepsin C-based screening methods for identifying modulators of pain
(Patent) 3
IN Gebauer Mathias (Frankfurt am Main, DE); Michaelis Martin (Frankfurt am
Main, DE); Ding-Pfennigdorff Danping (Frankfurt am Main, DE); Schulte
Anke (Frankfurt am Main, DE); Metz-Weidmann Christiane (Frankfurt am
Main, DE)
PA SANOFI (Paris FR)
PI US 8349567 B2 20130108
US 20110091888 A1 20110421
WO 2009118137 A 20091001 4
AI US 2009-934178 20090321
RLI WO 2009-EP2091 20090321
PRAI EP 2008-290285 20080326
XPD 20290321 (calculated) 5 6
PSL Claim 5; SEQ ID NO 2
DESC Homo sapiens protein; sequence 2 of 7
DT Patent
AB Present invention concerns the use of Cathepsin C. Other aspects of the
7 invention concern methods for screening pharmaceuticals, for diagnosing
pain susceptibility and for the treatment of pain.
CLM US8349567 B2: 1. A method for identifying a compound that reduces pain
8 comprising: a. providing a test cell transfected with a nucleic acid
vector comprising the promoter of a Cathepsin C gene operably linked to a
reporter gene;b. determining the reporter gene activity of the test cells
in the presence of a test compound;c. determining the reporter gene
activity of the test cells in absence of the test compound; andd.
comparing the reporter gene activity of the test cells in the presence of
the test compound to the reporter gene activity of the test cells in the
absence of the test compound, wherein a decrease in activity of the
reporter gene in the test cell in the presence of the test compound as
compared to the activity of the reporter gene in the test cell in the
absence of the test compound indicates that the test compound will reduce
pain.

2. The method of claim 1, wherein the reporter gene is selected from the
group consisting of beta lactamase (LacZ), luciferase, green fluorescent
protein (GFP), blue fluorescent protein (BFP), DsRed, HIS3, URA3, TRP1,
LEU2, and beta galactosidase.

3. A method for identifying a compound that reduces pain comprising: a.
contacting a nucleic acid coding for a Cathepsin C protein with a test
compound in a transcriptionally active system;b. determining the amount
of mRNA coding for the Cathepsin C protein that is present in the system
in the presence of the test compound;c. determining the amount of mRNA
coding for the Cathepsin C protein that is present in the system in the
absence of the test compound; andd. comparing the amount of mRNA that is
present in the system in the presence of the test compound to the amount
of mRNA that is present in the system in the absence of the test
compound, wherein decreased expression of mRNA in the presence of the
test compound as compared to the expression level of mRNA in the absence
of the test compound indicates that the test compound will reduce pain.

4. The method of claim 3, wherein a cell expressing recombinant Cathepsin
C is used.

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SSO PROTEIN; PSIPS; GRANTED 9
ORGN Homo sapiens
SQL 463 10
SEQ

1 mgagpslllla alllllsgdg avrcdtpanc tyldllgtwv fqvgssgsqr
51 dvnscsvmgrpq ekkvvvylqk ldtayddlgn sghftiiynq gfeivlndyk
101 wfaffkykee gskvttycne tmtgwvhdlv grnwacftgk kvgtasenvy
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451 esiavaatpi pkl

FEATURE TABLE:

Key |Location| 12
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USGENE |1..463 |http://www.sequencebase.com/usgene.php?d=8349567.2
PSIPS |1..463 |http://www.sequencebase.com/psips.php?d=8349567.2

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- 1 USGENE Accession Number (AN), including the sequence identity number (SEQ ID NO)
- 2 Molecule Type (MTY)
- 3 Original patent title
- 4 Bibliographic information – Publication, application, priority, assignee & inventor data
- 5 Calculated expiration date
- 6 Patent Sequence Location
- 7 Original patent abstract
- 8 Full patent claims
- 9 Sequence source – Nucleic or Protein; PSIPS/USPTO, NCBI, etc; Granted or Application
- 10 Sequence Length
- 11 Patent sequence – each USGENE record is based upon a sequence
- 12 Feature table - includes sequence modifications and other features, as provided by the patent applicant