Modification Form for Permit BIO-UWO-0069

Permit Holder: David Litchfield

Approved Personnel
(Please stroke out any personnel to be removed)

Jacob Turowec

Laszlo Gyenis

Nicole St-Denis

Greg Vilk

Jennifer Raaf

Dana Onica

Michelle Gabriel

Kathryn Garside

Additional Personnel
(Please list additional personnel here)

	Please stroke out any approved Biohazards to be removed below	**Write additional Biohazards for approval below. Give the full name - do not abbreviate.**
Approved Microorganisms	E. coli, DH5 alpha, XL1 Blue, BL21, S. Cerevisea	
Approved Primary and Established Cells	Human (established), U20S, HeLa, Rodent (established), various fibroblast lines, Non-human primate (established), Cos7	PANC-1
Approved Use of Human Source Material		
Approved Genetic Modifications (Plasmids/Vectors)	SV 40 Large T antigen, Cos7 cells, CK2 protein, pCDNA3-Casp8, pET15b-Casp8 delta DED, pET15b-Casp8 delta DED C3600A, pCDNA3-Casp8 C360A, HDAC4 Flag, pmAmetrine-DEVD-td Tomato, pJ3H-	
Approved Use of Animals		
Approved Biological Toxin(s)	Okadaic acid	

** PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.*
*** PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE STORED, USED AND DISPOSED OF..*

As the principal investigator, I have ensured that all of the personnel named on the form have been trained. I will ensure that this project will follow the Western Biosafety Guidelines and Procedures Manual for Containment Level 1 2 Laboratories (and the Level 3 Facilities Manual for Level 3 projects). I will ensure that UWO faculty, staff and students working in my laboratory have an up-to-date Hazard Communication Form, found at http://www.wph.uwo.ca.

Signature of Permit Holder: _____

Current Classification: 2 **Containment Level for Added Biohazards:** 1

Date of Last Biohazardous Agents Registry Form: Dec 14, 2007

Date of Last Modification (if applicable): Aug 13, 2010

BioSafety Officer(s): _____

Chair, Biohazards Subcommittee: _____ **Date:** _____

ATCC | THE ESSENTIALS OF LIFE SCIENCE RESEARCH GLOBALLY DELIVERED

Product Description

Before submitting an order you will be asked to read and accept the terms and conditions of ATCC's Material Transfer Agreement or, in certain cases, an MTA specified by the depositing institution.

Customers in Europe, Australia, Canada, China, Hong Kong, India, Israel, Japan, Korea, Macau, Mexico, New Zealand, Singapore, and Taiwan, R.O.C. must contact a local distributor for pricing information and to place an order for ATCC cultures and products.

Print this Page

Cell Biology

ATCC® Number: CRL-1469™ Order this Item **Price:** $256.00

Designations:	PANC-1
Depositors:	M Lieber
Biosafety Level:	1
Shipped:	frozen
Medium & Serum:	See Propagation
Growth Properties:	adherent
Organism:	*Homo sapiens* (human)
Morphology:	epithelial
Source:	**Organ:** pancreas **Tissue:** duct **Disease:** epithelioid carcinoma
Permits/Forms:	In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.
Applications:	transfection host (Nucleofection technology from Lonza Roche FuGENE® Transfection Reagents)
DNA Profile (STR):	Amelogenin: X CSF1PO: 10,12 D13S317: 11 D16S539: 11 D5S818: 11,13 D7S820: 8,10 THO1: 7,8 TPOX: 8,11 vWA: 15
Cytogenetic Analysis:	Chromosome studies indicate a modal number of 63 with 3 distinct marker chromosomes and a small ring chromosome. This is a hypertriploid human cell line. The modal chromosome number was 61, occurring in 32% of cells., However, cells with 63 chromosomes also occurred at a high frequency (22%). The rate of cells with higher ploidies was 8.5%.
Isoenzymes:	G6PD, B
Age:	56 years
Gender:	male
Ethnicity:	Caucasian
Comments:	Growth is inhibited by 1 unit/ml L-asparaginase. The cells will grow in soft agar.

Related Links

NCBI Entrez Search
Make a Deposit
Frequently Asked Questions
Material Transfer Agreement
Technical Support
Related Cell Culture Products

Login Required

Product Information Sheet

Propagation:	**ATCC complete growth medium:** The base medium for this cell line is ATCC-formulated Dulbecco's Modified Eagle's Medium, Catalog No. 30-2002. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%. **Temperature:** 37.0°C **Atmosphere:** air, 95%; carbon dioxide (CO_2), 5%
Subculturing:	**Subcultivation Ratio:** A subcultivation ratio of 1:2 to 1:4 is recommended **Medium Renewal:** 2 to 3 times per week Remove medium, and rinse with 0.25% trypsin, 0.53mM EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.
Preservation:	culture medium 95%; DMSO, 5%
Doubling Time:	52 hrs
Related Products:	Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2002 recommended serum:ATCC 30-2020
References:	22850: Lieber M, et al. Establishment of a continuous tumor-cell line (panc-1) from a human carcinoma of the exocrine pancreas. Int. J. Cancer 15: 741-747, 1975. PubMed: 1140870 22859: Wu MC, et al. Mechanism of sensitivity of cultured pancreatic carcinoma to asparaginase. Int. J. Cancer 22: 728-733, 1978. PubMed: 363626 23079: Lan MS, et al. Polypeptide core of a human pancreatic tumor mucin antigen. Cancer Res. 50: 2997-3001, 1990. PubMed: 2334903

Return to Top

Notices and Disclaimers

ATCC products are intended for laboratory research purposes only, unless noted otherwise. They are not intended for use in humans.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this site, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

All prices are listed in U.S. dollars and are subject to change without notice. A discount off the current list price will be applied to most cultures for nonprofit institutions in the United States. Cultures that are ordered as test tubes or flasks will carry an additional laboratory fee. Fees for permits, shipping, and handling may apply.

Back to my Search

Modification Form for Permit BIO-UWO-0069

Permit Holder: David Litchfield

Approved Personnel
(Please stroke out any personnel to be removed)

Jennifer Raaf

Dana Onica

Michelle Gabriel

Kathryn Garside

Jacob Turowec

Laszlo Gyenis

Nicole St-Denis

Greg Vilk

Additional Personnel
(Please list additional personnel here)

	Please stroke out any approved Biohazards to be removed below	**Write additional Biohazards for approval below. Give the full name - do not appreviate.**
Approved Microorganisms	E. coli, DH5 alpha, XL1 Blue, BL21, S. Cerevisea	
Approved Primary and Established Cells	Human (established), U20S, HeLa, Rodent (established), various fibroblast lines, Non-human primate (established), Cos7	
Approved Use of Human Source Material		
Approved Genetic Modifications (Plasmids/Vectors)	SV 40 Large T antigen, Cos7 cells, CK2 protein, pCDNA3-Casp8, pET15b-Casp8 delta DED, pET15b-Casp8 delta DED C3600A, pCDNA3-Casp8 C360A, HDAC4 Flag, pmAmetrine-DEVD-td Tomato, pJ3H-	pET23b - Casp3 - C163A - His pCDNA3 - Casp7 - FLAG pCDNA3 - Casp7 - C186Q - FLAG pET23b - Casp7 - His pET23b - Casp7 - C186Q - His pET23b - Casp9 - His
Approved Use of Animals		
Approved Biological Toxin(s)	Okadaic acid	

** PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.*
*** PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE STORED, USED AND DISPOSED OF..*

As the principal investigator, I have ensured that all of the personnel named on the form have been trained. I will ensure that this project will follow the Western Biosafety Guidelines and Procedures Manual for Containment Level 1 2 Laboratories (and the Level 3 Facilities Manual for Level 3 projects). I will ensure that UWO faculty, staff and students working in my laboratory have an up-to-date Hazard Communication Form, found at http://www.wph.uwo.ca.

Signature of Permit Holder: David Kelly

Current Classification: 2 **Containment Level for Added Biohazards:**

Date of Last Biohazardous Agents Registry Form: Dec 14, 2007

Date of Last Modification (if applicable): Mar 18, 2009

BioSafety Officer(s): J Stanley Aug 13, 2010

Chair, Biohazards Subcommittee: Susan Koval **Date:** August 13, 2010

10/07/13 Statement of Intent for Modification form BIO-UWO-0069

The requested pET23b plasmids will be used for transformation into BL21 *E. coli* followed by protein isolation. The isolated caspases will be used in enzymatic reactions. The pCDNA3 plasmids will be used for transfection of cultured mammalian cells for the purpose of over-expressing caspase-7. Isolated lysates will be used in various molecular biology applications (western blots, etc.). All information pertaining to these plasmids as provided by Addgene are attached.

addgene

Find this plasmid at: www.addgene.org
Enter "11826" in the search box

Plasmid 11826: pET23b-Casp7 C186A-His

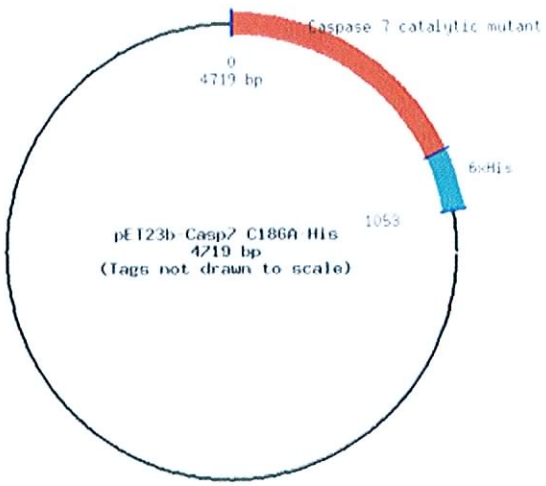
Gene/insert name:	Caspase 7 catalytic mutant
Alternative names:	Caspase 7
Insert size (bp):	1053
Gene/insert aliases:	CASP7, MCH3, CMH-1, ICE-LAP3
Species of gene(s):	H. sapiens (human)
Relevant mutations/deletions:	C186A
Fusion proteins or tags:	6xHis
Terminal:	C terminal on insert
Vector backbone:	pET-23 b (Search Vector Database)
Type of vector:	Bacterial expression
Backbone size (bp):	3666
Cloning site 5':	XhoI
Site destroyed during cloning:	Unknown
Cloning site 3':	NdeI
Site destroyed during cloning:	Unknown
5' Sequencing primer:	T7 terminal primer (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Sequence:	Visit www.addgene.org/11826
Plasmid Provided In:	DH5a
Principal Investigator:	Guy Salvesen

Article: Target protease specificity of the viral serpin CrmA. Analysis of five caspases. Zhou Q et al. (J Biol Chem. 1997 Mar 21. 272(12):7797-800. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication.

Also, please include the text "Addgene plasmid 11826" in your Materials and Methods section. This information allows Addgene to create a link from the plasmid page to your publication.

Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.



Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.

Plasmid 11825: pET23b-Casp7-His

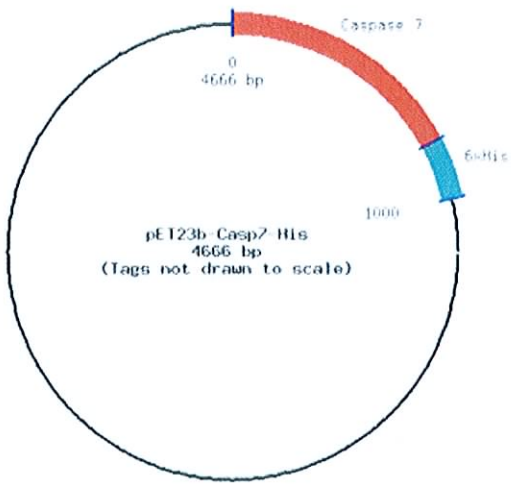
Gene/insert name:	Caspase 7
Insert size (bp):	1000
Gene/insert aliases:	CASP7, MCH3, CMH-1, ICE-LAP3
Species of gene(s):	H. sapiens (human)
Fusion proteins or tags:	6xHis
Terminal:	C terminal on insert
Vector backbone:	pET-23 b (Search Vector Database)
Type of vector:	Bacterial expression
Backbone size (bp):	3666
Cloning site 5':	XhoI
Site destroyed during cloning:	Unknown
Cloning site 3':	NdeI
Site destroyed during cloning:	Unknown
5' Sequencing primer:	T7 terminal primer (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Sequence:	Visit www.addgene.org/11825
Plasmid Provided In:	DH5a
Principal Investigator:	Guy Salvesen

Article: Target protease specificity of the viral serpin CrmA. Analysis of five caspases. Zhou Q et al. (J Biol Chem. 1997 Mar 21. 272(12):7797-800. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication.

Also, please include the text "Addgene plasmid 11825" in your Materials and Methods section. This information allows Addgene to create a link from the plasmid page to your publication.

Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.



Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.

addgene

Find this plasmid at: www.addgene.org
Enter "11822" in the search box

Plasmid 11822: pET23b-Casp3 C163A-His

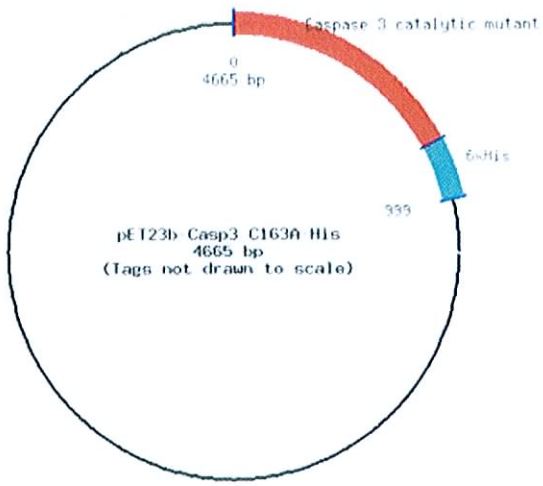
Gene/insert name:	Caspase 3 catalytic mutant
Alternative names:	Caspase 3
Insert size (bp):	999
Gene/insert aliases:	CASP3, CPP32, SCA-1, CPP32B
Species of gene(s):	H. sapiens (human)
Relevant mutations/deletions:	C163A
Fusion proteins or tags:	6xHis
Terminal:	C terminal on insert
Vector backbone:	pET-23 b (Search Vector Database)
Type of vector:	Bacterial expression
Backbone size (bp):	3666
Cloning site 5':	XhoI
Site destroyed during cloning:	Unknown
Cloning site 3':	NdeI
Site destroyed during cloning:	Unknown
5' Sequencing primer:	T7 terminal primer (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Sequence:	Visit www.addgene.org/11822
Plasmid Provided In:	DH5a
Principal Investigator:	Guy Salvesen

Article: Target protease specificity of the viral serpin CrmA. Analysis of five caspases. Zhou Q et al. (J Biol Chem. 1997 Mar 21. 272(12):7797-800. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication.

Also, please include the text "Addgene plasmid 11822" in your Materials and Methods section. This information allows Addgene to create a link from the plasmid page to your publication.

Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.



Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.

addgene

Find this plasmid at: www.addgene.org
Enter "11829" in the search box

Plasmid 11829: pET23b-Casp9-His

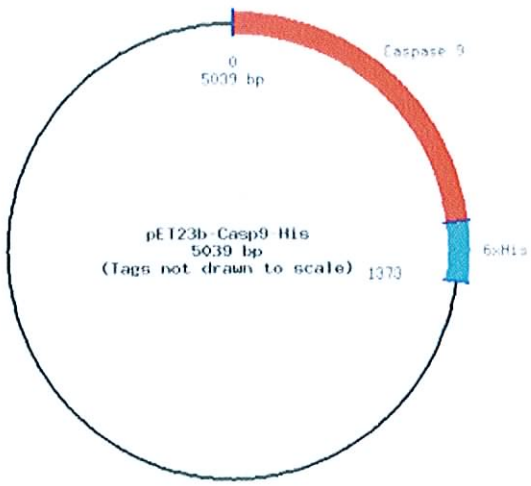
Gene/insert name:	Caspase 9
Insert size (bp):	1373
Gene/insert aliases:	CASP9, MCH6, APAF3, APAF-3, ICE-LAP6, CASPASE-9c
Species of gene(s):	H. sapiens (human)
Fusion proteins or tags:	6xHis
Terminal:	C terminal on insert
Vector backbone:	pET-23 b (Search Vector Database)
Type of vector:	Bacterial expression
Backbone size (bp):	3666
Cloning site 5':	Don't Know
Site destroyed during cloning:	Unknown
Cloning site 3':	Don't Know
Site destroyed during cloning:	Unknown
5' Sequencing primer:	T7 terminal primer (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Sequence:	Visit www.addgene.org/11829
Plasmid Provided In:	DH5a
Principal Investigator:	Guy Salvesen

Article: Caspase-9 can be activated without proteolytic processing. Stennicke HR et al. (J Biol Chem. 1999 Mar 26. 274(13):8359-62. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication.

Also, please include the text "Addgene plasmid 11829" in your Materials and Methods section. This information allows Addgene to create a link from the plasmid page to your publication.

Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.



Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.

addgene

Find this plasmid at: www.addgene.org
Enter "11816" in the search box

Plasmid 11816: pcDNA3-Casp7 C186A-Flag

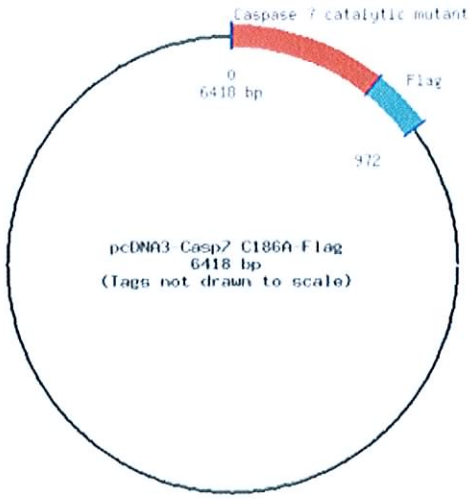
Gene/insert name:	Caspase 7 catalytic mutant
Alternative names:	Caspase 7
Insert size (bp):	972
Gene/insert aliases:	CASP7, MCH3, CMH-1, ICE-LAP3
Species of gene(s):	H. sapiens (human)
Relevant mutations/deletions:	C186A
Fusion proteins or tags:	Flag
Terminal:	C terminal on insert
Vector backbone:	pcDNA3 (Search Vector Database)
Backbone manufacturer:	Invitrogen
Type of vector:	Mammalian expression
Backbone size (bp):	5446
Cloning site 5':	KpnI
Site destroyed during cloning:	Unknown
Cloning site 3':	XhoI
Site destroyed during cloning:	Unknown
5' Sequencing primer:	T7 (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Selectable markers:	Neomycin
Sequence:	Visit www.addgene.org/11816
Plasmid Provided In:	DH5a
Principal Investigator:	Guy Salvesen

Article: Biochemical characteristics of caspases-3, -6, -7, and -8. Stennicke HR et al. (J Biol Chem. 1997 Oct 10. 272(41):25719-23. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication.

Also, please include the text "Addgene plasmid 11816" in your Materials and Methods section. This information allows Addgene to create a link from the plasmid page to your publication.

Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.



Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.

addgene

Find this plasmid at: www.addgene.org
Enter "11815" in the search box

Plasmid 11815: pcDNA3-Casp7-Flag

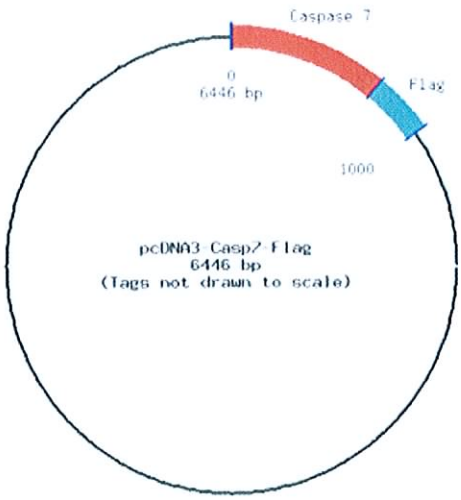
Gene/insert name:	Caspase 7
Insert size (bp):	1000
Gene/insert aliases:	CASP7, MCH3, CMH-1, ICE-LAP3
Species of gene(s):	H. sapiens (human)
Fusion proteins or tags:	Flag
Terminal:	C terminal on insert
Vector backbone:	pcDNA3 (Search Vector Database)
Backbone manufacturer:	Invitrogen
Type of vector:	Mammalian expression
Backbone size (bp):	5446
Cloning site 5':	KpnI
Site destroyed during cloning:	Unknown
Cloning site 3':	XhoI
Site destroyed during cloning:	Unknown
5' Sequencing primer:	T7 (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Selectable markers:	Neomycin
Sequence:	Visit www.addgene.org/11815
Plasmid Provided In:	DH5a
Principal Investigator:	Guy Salvesen

Article: Biochemical characteristics of caspases-3, -6, -7, and -8. Stennicke HR et al. (J Biol Chem. 1997 Oct 10. 272(41):25719-23. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication.

Also, please include the text "Addgene plasmid 11815" in your Materials and Methods section. This information allows Addgene to create a link from the plasmid page to your publication.

Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.



Information on this datasheet is provided pursuant to Addgene's Terms of Use at www.addgene.org.

Modification Form for Permit BIO-UWO-0069

Permit Holder: David Litchfield

Approved Personnel
(Please stroke out any personnel to be removed)

Kathryn Garside

~~Deborah Ng~~

Jacob Turowec

Laszlo Gyenis

Nicole St-Denis

~~Melanie Bailey~~

~~Erin Parker~~

~~Ashley French~~

Additional Personnel
(Please list additional personnel here)

Michelle Gabriel

Dana Onica

Greg Vilk

Jennifer Raaf

	Please stroke out any approved Biohazards to be removed below	Write additional Biohazards for approval below. *
Approved Microorganisms	E. coli, DH5 alpha, XL1 Blue, BL21, S. Cerevisea	
Approved Cells	Human (established), U20S, HeLa, Rodent (established), various fibroblast lines, Non-human primate (established), Cos7	
Approved Use of Human Source Material		
Approved GMO	SV 40 Large T antigen, Cos7 cells, CK2 protein, pCDNA3-Casp8, pET15b-Casp8 delta DED, pET15b-Casp8 delta DED C3600A, pCDNA3-Casp8 C360A, HDAC4 Flag, pmAmetrine-DEVD-td Tomato	pJ3H-Mst2 K56R pJ3H-Mst1
Approved use of Animals		
Approved Toxin(s)	Okadaic acid	

MSDS and Description

There is no MSDS that I am aware of for the requested products. The pJ3H-MST2 K56R and pJ3H-MST1 DNA plasmids are shipped as bacterial stabs in the E. coli strain DH5α (an approved microorganism on our permit). These E. coli will be grown and the plasmid DNA isolated for use in transfection of approved mammalian cell lines. Cell lysates will be analyzed using various biochemical methods.

addgene

Login | New User

Search for Plasmids: Go

Advanced Search

Home Deposit Plasmids **Request Plasmids** Plasmid Tools About Addgene

Information Browse Search Pricing FAQ

Plasmid Cart

Your cart is empty.

Recently Viewed

pJ3H-Mst1
Plasmid 12203

Browse > Jonathan Chernoff > Creasy et al > pJ3H-Mst1

Print Friendly Email

Add to Cart

Price: $65.00

Plasmid 12203: pJ3H-Mst1

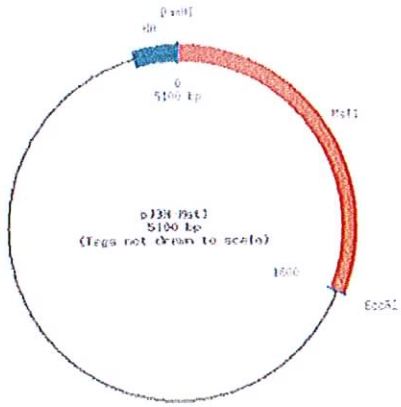
Gene/insert name:	Mst1
Insert size (bp):	1600
Gene/insert aliases:	MST1, MSP, HGFL, NF15S2, D3F15S2, DNF15S2, STK4, KRS2, MST1, YSK3, DKFZp686A2068
Species of gene(s):	H. sapiens (human)
Fusion proteins or tags:	HA
Terminal:	N terminal on backbone
Vector backbone:	pJ3H (Search Vector Database)
Type of vector:	Mammalian expression
Backbone size (bp):	3500
Cloning site 5':	BamHI
Site destroyed during cloning:	No
Cloning site 3':	EcoRI
Site destroyed during cloning:	No
5' Sequencing primer:	SV40pro-F (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Sequence:	View sequence
Plasmid Provided In:	DH5a
Principal Investigator:	Jonathan Chernoff
Terms and Licenses:	MTA

Addgene has sequenced a portion of this plasmid for verification. Click here for the sequencing result

Click on map to enlarge

Plasmid Links
Sequence
Reviews (0)
Related Plasmids
From this article
STK4 plasmids
MST1 plasmids
Jonathan Chernoff Lab Plasmids
Other Links
NCBI: STK4
NCBI: MST1
STK4 antibodies

This is commonly requested with
pJ3M-Mst1 K59R
pJ3M-Mst2
pJ3H-Mst2 K56R



Article: The Ste20-like protein kinase, Mst1, dimerizes and contains an inhibitory domain.
Creasy CL et al. (J Biol Chem. 1996 Aug 30; 271(35):21049-53. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication.

Also, please include the text "Addgene plasmid 12203" in your Materials and Methods section. This information allows Addgene to create a link from the plasmid page to your publication.

© 2003-2009 Addgene, Inc. All Rights Reserved

addgene

Login | New User

Search for Plasmids: Go

Advanced Search

Home Deposit Plasmids Request Plasmids Plasmid Tools About Addgene

Information Browse Search Pricing FAQ

Browse > Jonathan Chernoff > Creasy et al > pJ3H-Mst2 K56R

Print Friendly Email

Add to Cart

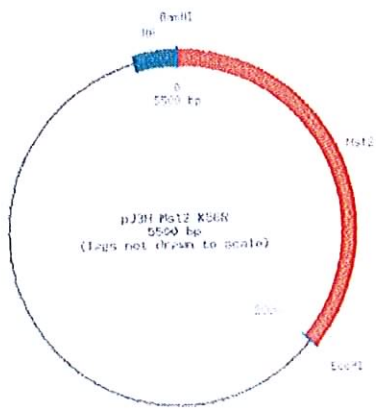
Price: $65.00

Plasmid 12206: pJ3H-Mst2 K56R

Gene/insert name:	Mst2
Insert size (bp):	2000
Gene/insert aliases:	STK3, KRS1, MST2, FLJ90748
Species of gene(s):	H. sapiens (human)
Relevant mutations/deletions:	Catalytically inactive: K56R
Fusion proteins or tags:	HA
Terminal:	N terminal on backbone
Vector backbone:	pJ3H (Search Vector Database)
Type of vector:	Mammalian expression
Backbone size (bp):	3500
Cloning site 5':	BamHI
Site destroyed during cloning:	No
Cloning site 3':	EcoRI
Site destroyed during cloning:	No
5' Sequencing primer:	SV40pro-F (List of Sequencing Primers)
Bacteria resistance:	Ampicillin
High or low copy:	High Copy
Grow in standard E. coli @ 37C:	Yes
Sequence:	View sequence
Plasmid Provided In:	DH5a
Principal Investigator:	Jonathan Chernoff
Terms and Licenses:	MTA

Addgene has sequenced a portion of this plasmid for verification. Click here for the sequencing result.

Click on map to enlarge



Plasmid Links
Sequence
Reviews (0)
Related Plasmids
From this article
STK3 plasmids
Jonathan Chernoff Lab Plasmids
Other Links
NCBI: STK3

This is commonly requested with
pJ3M-Mst2
pJ3H-Mst1
pJ3M-Mst1 K59R

Plasmid Cart
Your cart is empty.

Recently Viewed
pJ3H-Mst2 K56R Plasmid 12206
pJ3H-Mst1 Plasmid 12203

Article: The Ste20-like protein kinase, Mst1, dimerizes and contains an inhibitory domain.
Creasy CL et al. (J Biol Chem. 1996 Aug 30; 271(35):21049-53. Pubmed)

Please acknowledge the principal investigator and cite this article if you use this plasmid in a publication

Also, please include the text "Addgene plasmid 12206" in your Materials and Methods section.
This information allows Addgene to create a link from the plasmid page to your publication

© 2003-2009 Addgene, Inc. All Rights Reserved

Modification Form for Permit BIO-UWO-0069

Permit Holder: David Litchfield

	Please stroke out any approved Biohazards to be removed below	Write additional Biohazards for approval below. *
Approved Microorganisms	E. coli, DH5 alpha, XL1 Blue, BL21, S. Cerevisea	
Approved Cells	Human (established), U20S, HeLa, Rodent (established), various fibroblast lines, Non-human primate (established), Cos7	
Approved Use of Human Source Material		
Approved GMO	SV 40 Large T antigen, Cos7 cells, CK2 protein, pCDNA3-Casp8, pET15b-Casp8 della DED, pET15b-Casp8 della DED C360A, pCDNA3-Casp8 C360A, HDAC4 Flag	proAmeline-DEVD-Id Tomato
Approved use of Animals		
Approved Toxin(s)	Okadaic acid	

* *PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.*
** *PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED.*

Classification: 2

Date of last Biohazardous Agents Registry Form: Dec 14, 2007

Signature of Permit Holder: David Litchfield

BioSafety Officer(s): [signature] Jan 30/09

Chair, Biohazards Subcommittee: [signature]

Modification Form for Permit BIO-UWO-0069

Permit Holder: David Litchfield

Approved Personnel
(Please stroke out any personnel to be removed)

Elizabeth Roach--

Jacob Turowec

Laszlo Gyenis

Nicole St-Denis

~~Kelly Duncan~~

Melanie Bailey

Erin Parker

Ashley French

~~James Duncan~~

~~Rich Dickson~~

Additional Personnel
(Please list additional personnel here)

Greg Vilk

Deborah Yuen Ling Ng

Kathryn Garside

* *PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.*
** *PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED*

Classification: 2

Date of last Biohazardous Agents Registry Form: Dec 14, 2007

Signature of Permit Holder: David Litchfield

BioSafety Officer(s): [illegible] Jan 30/09

Chair, Biohazards Subcommittee: [illegible]

We will be transfecting this plasmid into mammalian cells. The plasmid encodes a FRET molecule that can be used to monitor, via confocal microscopy, the activation of caspases - a group of proteolytic enzymes responsible for carrying out programmed cell death.

Modification Form for Permit BIO-UWO-0069

Permit Holder: David Litchfield

	Please stroke out any approved Biohazards to be removed below	Write additional Biohazards for approval below. *
Approved Microorganisms	E. coli, DH5 alpha, XL1 Blue, BL21, S Cerevisea	
Approved Cells	Human (established), U20S, HeLa, Rodent (established), various fibroblast lines, Non human primate (established), Cos7	
Approved Use of Human Source Material		
Approved GMO	SV 40 Large T antigen, Cos7 cells, CK2 protein	pCDNA3 · Cus/8 pETISb · Cusp8 della DED pETISb · Cusp8 della DED C360A pCDNA3 · Cusp8 C360A HDACY Flag
Approved use of Animals		
Approved Toxin(s)	Okadaic acid	

* *PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.*
** *PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED.*

Date of last Biohazardous Agents Registry Form Dec 14, 2007

Signature of Permit Holder: David Litchfield

BioSafety Officer(s): [illegible] Oct 23/08

Chair,Biohazards Subcommittee: [illegible]

Modification Form for Permit BIO-UWO-0069

Permit Holder: David Litchfield

Approved Personnel
(Please stroke out any personnel to be removed)

Additional Personnel
(Please list additional personnel here)

Elizabeth Roach

Jacob Turowec

Laszlo Gyenis

Nicole St-Denis

Kelly Duncan

Melanie Bailey

Erin Parker

Ashley French

James Duncan

Rich Derkson

* *PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.*
** *PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED*

Date of last Biohazardous Agents Registry Form Dec 14, 2007

Signature of Permit Holder: David Litchfield

BioSafety Officer(s): [illegible]

Chair, Biohazards Subcommittee

Modification Form for Permit BIO-UWO-0069
Permit Holder: David Litchfield

Intended use for pCDNA3-casp 8, pCDNA3-casp 8 C360A and HDAC4 Flag:

These three plasmid constructs will be transfected into established human cell lines. Their regulation (ie phosphorylation, proteolysis) will be studied using *in vitro* and *in vivo* molecular techniques.

Intended use for pET15b-Casp 8 delta DED, pET15b-Casp 8 delta DED C360A

These plasmids will be electroporated into BL21 E. coli cells in order to produce purified caspase 8 protein. The purified caspase 8 protein will be used in *in vitro* caspase assays and as a substrate in phosphorylation assays.

David Litchfield

BIO-UWO-0069

THE UNIVERSITY OF WESTERN ONTARIO
BIOHAZARDOUS AGENTS REGISTRY FORM
Revised Biohazards Subcommittee: January, 2007

This form must be completed by each Principal Investigator holding a grant administered by the University of Western Ontario where the use of biohazardous infectious agents are described in the experimental work proposed. The form must also be completed if animal work is proposed involving the use of biohazardous agents or animal carrying zoonotic agents infectious to humans. Containment Levels will be required in accordance with Laboratory Biosafety Guidelines, 3rd edition, 2004, Health Canada (HC) or Containment Standards for Veterinary Facilities, 1st edition 1996, Canadian Food Inspection Agency (CFIA)

Completed forms are to be returned to Occupational Health and Safety (Stevenson-Lawson Building, Room 60) for forward to the Biohazard Subcommittee. For questions regarding this form, please contact the Biosafety Coordinator at extension 81135. If there are changes to the information on this form (excluding grant title and funding agencies) modifications must be completed and sent to Occupational Health and Safety. See website: www.uwo.ca/humanresources

PRINCIPAL INVESTIGATOR____Dr. David Litchfield________

SIGNATURE ________________________

DEPARTMENT ____Biochemistry________

ADDRESS____The University of Western Ontario
Medical Science Building
Rooms 359, 355 and 380_(labs) Room 350 (office)
London ON N6A 5C1

PHONE NUMBER____519-661-2111 ext 86849 (lab) 84186 (office)______

EMAIL ___litchfi@uwo.ca________________________

Location of experimental work to be carried out: Building(s)_MSB_ Room(s) 359/355/380
*For work being performed at Institutions affiliated with the University of Western Ontario, the Safety Officer for the Institution where experiments will take place must sign the form prior to it being sent to Occupational Health and Safety (See Section 12.0, Approvals). For research being done at Lawson Health Research Institute, London Regional Cancer Centre, Child and Parent Research Institute or Robarts Research Institute, University Biosafety Committee members can also sign as the Safety Officer

TITLE OF GRANT(S):

NCIC – Regulation and Role of CK2 during cell cycle progression.
CIHR – Signaling pathways controlling proliferation and survival.
OCRN – Rational design of novel modulators of cell proliferation.

PLEASE ATTACH A BRIEF DESCRIPTION OF YOUR WORK, SUCH A THE RESEARCH GRANT SUMMARY(S) THAT EXPLAINS THE BIOHAZARDS USED. PROJECTS SUBMITTED WITHOUT A SUMMARY WILL NOT BE REVIEWED.

FUNDING AGENCY/AGENCIES_____NCIC, OCRN, CIHR________________

Names of all personnel working under Principal Investigator's supervision in this location:
- Ben Parker (Grad Student)
- Melanie Bailey (Grad Student)
- [illegible] Duncan (Postdoctoral Fellow)

[illegible]

[illegible]

iv) Ashley French (Research Associate)
v) James Duncan (Grad Student)
vi) Nicole St-Denis (Grad Student)
vii) Laszlo Gyenis (Postdoctoral Fellow)
viii) Jacob Turowec (Grad Student)
ix) Rich Derksen (Research Associate)
x) Elizabeth Roach (4th year student)

1.0 Microorganisms

1.1 Does your work involve the use of microorganisms or biological agents of plant or animal origin (including but not limited to viruses, prions, parasites, bacteria)? X YES NO
If no, please proceed to Section 2.0

1.2 Please complete the table below:

Name of Biological agent(s)	Is it known to be a human pathogen? YES/NO	is it known to be an animal pathogen? YES/NO	Is it known to be a zoonotic agent? YES/NO	Maximum quantity to be cultured at one time?
E.Coli (DH5a)	Yes X No	Yes X No	Yes X No	10 L
E. Coli (XL1 Blue)	Yes X No	Yes X No	Yes X No	2 L
E. Coli (BL21)	Yes X No	Yes X No	Yes X No	10 L
S. Cerevisea	Yes X No	Yes X No	Yes X No	2 L

1.3 For above named organism(s) or biological agent(s) circle HC or CFIA Containment Level required. (1) 2 3

1.4 Source of microrganism(s) or biological agent(s)? _Invitrogen, collaborative labs_

2.0 Cell Culture

2.1 Does your work involve the use of cell cultures? X YES NO
If no, please proceed to Section 3.0

2.2 Please indicate the type of primary cells (i.e. derived from fresh tissue) that will be grown in culture in the table below.

Cell Type	Is this cell type used in your work?	Source of Primary Cell Culture Tissue
Human	Yes X No	
Rodent	Yes X No	
Non-human primate	Yes X No	
Other (specify)		

2.3 Please indicate the type of established cells that will be grown in culture in the table below.

Cell Type	Is this cell type used in your work?	Specific cell line(s)	Supplier / Source

Human	X Yes ( ) No	U20S, HeLa, many other types	Clontech, ATCC, collaborative labs
Rodent	X Yes ( ) No	Various fibroblast lines	Clontech, ATCC, collaborative labs
Non-human primate	X Yes ( ) No	Cos7	ATCC
Other (specify)	No ( ) Yes ( )		

2.4 For above named cell types(s) circle HC or CFIA containment level required 1 (2) 3

3.0 Use of Human Source Materials

3.1 Does your work involve the use of human source materials? ( ) YES X NO
If no, please proceed to Section 4.0

3.2 Indicate if the following will be used in the laboratory
- Human blood (whole) or other bodily fluids NO ( ) YES ( ) If YES, Specify _____
- Human blood (fraction) or other bodily fluids ( ) YES ( ) NO If YES, Specify _____
- Human organs (unpreserved) NO ( ) YES ( ) If YES, Specify _____
- Human tissues (unpreserved) NO ( ) YES ( ) If YES, Specify _____

3.3 Is human source known to be infected with and infectious agent YES NO
If YES , please name infectious agent _____

3.4 For above named materials circle HC or CFIA containment level required 1 2 3

4.0 Genetically Modified Organisms and Cell lines

4.1 Will genetic modifications be made to the microorganisms, biological agents or cells described in Sections 1.0 and 2.0 ? X YES NO ( )
If no, please proceed to Section 5.0

4.2 Will genetic sequences from the following be involved
- HIV YES ( ) X NO
if YES specify _____
- HTLV 1 or 2 or genes from any CDC class 4 pathogens YES X NO
if YES specify _____
- Other human or animal pathogen and or their toxins YES ( ) X NO
if YES specify _____

4.3 Will intact genetic sequences be used from
- SV 40 Large T antigen X YES ( ) NO If YES specify Cos7 cells _____
- Known oncogenes X YES ( ) NO If YES specify CK2 protein _____

4.4 Will a live vector(s) (viral or bacterial) be used for gene transduction YES X NO
If YES name virus _____

4.5 List specific vector(s) to be used Recombinant plasmids with CMV promoters (for example pBI, pRc/CMV, pTRE, pEGFP, etc)

4.6 Will virus be replication defective YES ( ) NO ( )
n/a

DESCRIPTION MUST BE ATTACHED TO THIS FORM OR PROJECT WILL NOT BE REVIEWED

4.7 Will virus be infectious to humans or animals YES NO
n/a

4.8 Will this be expected to increase the Containment Level required YES X NO

5.0 Human Gene Therapy Trials

5.1 Will human clinical trials using the viral vector in 4.0 be conducted? YES X NO
If no, please proceed to Section 6.0
If YES attach a full description of the make-up of the virus.

5.2 Will virus be able to replicate in the host? YES NO

5.3 How will the virus be administered? _____

5.4 Please give the Health Care Facility where the clinical trial will be conducted: _____

5.5 Has human ethics approval been obtained? YES NO

6.0 Animal Experiments

6.1 Will any of the agents listed be used in live animals? YES X
NO
If no, please proceed to section 7.0

6.2 Name of animal species to be used _____

6.3 AUS protocol # _____

6.4 If using murine cell lines, have they been tested for murine pathogens? YES NO

7.0 Use of Animal species with Zoonotic Hazards

7.1 Will any of the following animals or their organs, tissues, lavages or other bodily fluids including blood be used:

- Pound source dogs YES X NO
- Pound source cats YES X NO
- Sheep or goats YES X NO
- Non-Human Primates YES X NO If YES specify species _____
- Wild caught animals YES X NO If YES specify species _____
  colony # _____

8.0 Biological Toxins

8.1 Will toxins of biological origin be used? X YES NO
If no, please proceed to Section 9.0

8.2 If YES, please name the toxin Okadaic acid (phosphatase inhibitor)

8.3 What is the LD_{50} (specify species) of the toxin 5628 mg/kg

DESCRIPTION MUST BE ATTACHED TO THIS FORM OR PROJECT WILL NOT BE REVIEWED

9.0 Import Requirements

9.1 Will the agent be imported? YES : X NO
If no, please proceed to Section 10.0
If yes, country of origin_____

9.2 Has an Import Permit been obtained from HC for human pathogens? YES NO

9.3 Has an import permit been obtained from CFIA for animal pathogens? YES NO

9.4 Has the import permit been sent to OHS? YES : NO
If yes, Permit # _____

10.0 Training Requirements for Personnel named on Form

All personnel named on the above form who will be using any of the above named agents are required to attend the following training courses given by OHS

- Biosafety
- Laboratory and Environmental/Waste Management Safety
- WHMIS

As the Principal Investigator, I have ensured that all of the personnel named on the form who will be using any of the biohazardous agents in Sections 1.0 to 9.0 have been trained.

SIGNATURE _____

11.0 Containment Levels

11.1 For the work described in sections 1.0 to 9.0, please circle the highest HC or CFIA Containment Level required. 1 (2) 3

11.2 Has the facility been certified by OHS for this level of containment? X YES NO

11.3 If yes, please give the date and permit number June 20, 2006 BIO-UWO-0069
"Code reinspected Dec 2007 (new location)

12.0 Approvals

UWO Biohazard Subcommittee

Signature _____ Date 14 Dec, '07

Safety Officer for institution where experiments will take place

Signature _____ Date Dec 14, 2007

Safety Officer for University of Western Ontario (if different than above)

Signature _____ Date _____