Lcp1

FBrf0075219

UNIVERSITY OF CALIFORNIA, LOS ANGELES

UCLA

425

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO

SANTA BARBARA • SANTA CRUZ

December 20, 1990

John Merriam
UCLA Drosophila Genmaps Database
DEPARTMENT OF BIOLOGY
405 HILGARD AVENUE
LOS ANGELES, CALIFORNIA 90024-1606
FAX [redacted]

FAX: [redacted]

Hooper, Joan
Porter Biosciences Building
Campus Box 347
Boulder, CO 80309-0347

Dear Colleagues:

I would like to use information from the clone list to construct a "physical map" of the Drosophila genome. You have (a) clone(s) listed, as described below, so I would like to enlist your help. What I need for this project are the names and locations of chromosome rearrangement breakpoints that lie within the region of your clone/walk. Mapping breakpoints is the most reliable way of connecting the molecular with the cytological scales.

As you know, the clone list has been useful to Drosophila workers in finding starting points for their walks. The database is organized by references, so that the original cloning paper from a lab is cited as key #1, with subsequent papers cited by subject (key #5 is sequence information, for example). The clone list is therefore also a gene-by-gene literature index. The clone list is now mounted on the Indiana University BioArchive computer bulletin board in the FLY subdirectory. Use Internet address 129.79.1.101 and your local File Transfer Program.

Please take a few minutes to complete this form and return to me by FAX or mail. It will be most useful if you can update your clone sizes and make more exact your clone locations. Make any other changes you want also. List the rearrangements and which breakpoints you have identified. Any cytologically visible rearrangement (deletion, inversion, translocation, transposition, duplication) is useful. Please indicate if the same citation is the best reference, or indicate a better one (or a personal communication).

I thank you for your help as always. With your prompt and generous support I can expect to show you the results in March at the Chicago fly meeting.

List Rearrangements :	Breakpoint found:	Other breakpoints:
Df(2R)44CE		44C4; E2
In(2LR)P14 TE		44D1-2; E

CHANGE or CONFIRM indexing for original clone cit'n: Locations __ Clone sizes __ Names/Products __

Hooper J and Scott M (1988) 29th Annual Drosophila Conference.

Location	Key	kb gen/cDNA	Gene name (abbreviation) product rearrangements...
44CD	1	114 0	larval cuticle protein (Lcp1)

The clone is distal to 44C4 (within Df(2R)44CE)
proximal to 44D1-2 (outside In(2LR)P14TE)

The Lcp1 cDNA clone is described in Snyder, Metal (1981) Cell 25: 165-17

425
oper, Joan
Porter Biosciences Building
Campus Box 347
Boulder, Colorado 80309-0347

Hooper J (1988) 29th Annual Drosophila Research Conference

44CD 44DE

location changes

114 Kb in 44CD; 204 Kb in 44DE — kb per location?

genomic only — genomic or cDNA?

key details of cloning method

44CD → walk around λLC P1 (larval cuticle protein phage, Snyder et al (1981) Cell 25 165 — walk/jump

44DE → walk around 2536 (head specific transcript, Levy et al (1982) Dev Biol 94 451) and 12304 (Tough transcript, Carlson et al (1985) Dev Biol 103 371) — homology / transposon tag / expression, etc / oligonucleotide

other (specify)

Is the reference correct? (changes?) Hooper, J & Scott M (1989) The Drosophila patched gene encodes a putative membrane protein required for segmental patterning Cell 59: 751-765

Your name Joan Hooper

telephone number [redacted]

FAX number [redacted]

Please return to John Merriam, Biology Department,
University of California, Los Angeles, CA 90024
F # [redacted]

see FAX memo 1

rosophila clone list report form ver 12/6/89

please return to:

John Merriam
Biology Department
Univ California
Los Angeles, CA 90024

FAX # [redacted]
phone [redacted]

w/update
ate_____ record #_____ reference# 618
425

key (1) 2 3 (5) (6) 7 8

location	gene name	abbrev	product	cross loc	rearrange	Tstrain	marker
44D	patched	ptc					

Reference: Hooper, J.E. and M.P. Scott (1989)
Cell 59: 751-765.

alk/jump_____ origin

homology_____ origin

transposon tag_____ name

cDNA_____ express, enrich, or +/-

oligonucleotide_____ sequence

microcloning_____ PCR?

genomic kb seq. ~2 accession# M28418

cDNA kb seq. 5.3 accession# M28418

ORF 1384 #amino acids

kb transcript(s) 6.3 kb

product distribution stripes

genomic kb cloned 200 vector λ

cDNA kb cloned 5.3 vector λ

misc (promoters, transmembrane, DNA binding, etc) Transmembrane protein

F words patched, segment polarity, segmentation