



www.gudmap.org

Answer to GUDMAP Exercise Question 6:

Which genes are known to be involved in
the assembly of the filopodium?

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GUDMAP Web Portal

www.gudmap.org

The screenshot shows the GUDMAP web portal homepage. The browser address bar displays 'www.gudmap.org/index.html'. The page header includes the GUDMAP logo and a navigation menu with items: Home, About GUDMAP, Gene Expression, Resources, Tutorials, Disease, and Help. A search bar is located in the top right corner.

On the left side, there is a vertical navigation menu with the following items: Home, About GUDMAP, Gene Expression, Resources, Tutorials, Disease, Help, and News (updated: 20-01-14).

The main content area features a 'Database Statistics' table, a 'Search Data' button (highlighted with a red arrow), a 'Marker Mouse Strains' button, and a 'NEW Reporter Strain Nominations' banner.

Assay Type	Entries	Genes
All In Situ Hybridisation (ISH):	10758	3692
Wholemout ISH (WISH):	7288	2896
Section ISH (SISH):	3406	1436
OPT ISH:	64	32
Immunohistochemistry (IHC):	326	20
Transgenic Reporters:	41	28
Microarray:	461	-

Below the statistics table, there is a text block describing the GUDMAP project:

The **GenitoUrinary Development Molecular Anatomy Project** (GUDMAP) is a consortium of laboratories working to provide the scientific and medical community with tools to facilitate research. The key components are:

- a molecular atlas of gene expression for the developing organs of the GenitoUrinary (GU) tract
- a high resolution molecular anatomy that highlights development of the GU system
- mouse strains to facilitate developmental and functional studies within the GU system
- tutorials describing GU organogenesis
- rapid access to primary data via the GUDMAP database

The GUDMAP tools, web site and database are a public resource funded by the National Institutes of Health, USA.

At the bottom of the main content area, there are three buttons: 'Web Demos', 'Download Data', and 'Development Tutorials'.

On the right side, there is a featured image of a 'Developmental Cell' journal cover with the text: 'Gandhi et al. Editors Development and Disease Dev Cell, 2013 Sep 16;26(5):469-82.' Below the image is a link for 'Image use policy'.

Expression Database

Tissue Summaries

Analysis

Downloads

Data Source

Collections

Expression Database

Query

Gene

Anatomy

Boolean Anatomy

Accession ID

Gene Function

Disease

Browse

Array Platform

Seq Series

Theiler Stage Sample

Gene WISH

In situ SISH






Transgenic OPT

IHC

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ISH	3692	10758
WISH	2896	7288
SISH	1436	3406
OPT	32	64
IHC	20	326
Tg	49	62
Microarray		461

Last Editorial Update: 19-Nov-2014
Last Software Update: 03-Nov-2014 (V 5.5.21)

Focus by Organ / System

-  [Metanephros](#)
-  [Lower urinary tract](#)
-  [Early reproductive system](#)
-  [Male reproductive system](#)
-  [Female reproductive system](#)

Expression Database

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Expression Database

Query

- Gene
- Anatomy
- Boolean Anatomy
- Accession ID
- Gene Function
- Disease

Browse






- Array
- Seq
- Theiler Stage
- Gene
- In situ
- Transgenic

-
- filopodium
 - filopodium assembly**
 - filopodium membrane
 - filopodium tip

Assay	Genes	Entries
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Last Editorial Update: 19-Nov-2014
Last Software Update: 24-Nov-2014 (V 5.5.24)

Focus by Organ / System

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-  [Female reproductive system](#)

filopodium assembly

Expression Database

Result of Gene Function query for *filopodium assembly*

Totals: In Situ(10) Microarray(0) Sequence(0) Display rows per page

10 Rows: Page 1 of 1

<input type="checkbox"/>	Gene	GUDMAP Entry Details	Source	Probe Name	Theiler Stage	Genotype	Images
<input type="checkbox"/>	Cdc42	GUDMAP:10667	GUDMAP-McMahon	maprobe:5312	23	Wild Type	
<input type="checkbox"/>	Cdc42	GUDMAP:10668	GUDMAP-McMahon	maprobe:5312	23	Wild Type	
<input type="checkbox"/>	Cdc42	GUDMAP:10974	GUDMAP-McMahon	maprobe:5312	23	Wild Type	
<input type="checkbox"/>	Cdc42	GUDMAP:10950	GUDMAP-McMahon	maprobe:5312	23	Wild Type	
<input type="checkbox"/>	Ezr	GUDMAP:15404	External-EuReGene	MGI:3724688	28	Wild Type	
<input type="checkbox"/>	Ezr	GUDMAP:15403	External-EuReGene	MGI:3724688	26	Wild Type	
<input type="checkbox"/>	Itga6	GUDMAP:9278	GUDMAP-McMahon	maprobe:4820	23	Wild Type	
<input type="checkbox"/>	Itga6	GUDMAP:9277	GUDMAP-McMahon	maprobe:4820	23	Wild Type	
<input type="checkbox"/>	Itga6	GUDMAP:14408	GUDMAP-Vezina	maprobe:6228	25	Wild Type	
<input type="checkbox"/>	Itga6	GUDMAP:14407	GUDMAP-Vezina	maprobe:6228	25	Wild Type	

Items in My Clipboard : 0

[Get intersection with My Entries Clipboard](#)

[Get difference with My Entries Clipboard](#)

Expression Database

Tissue Summaries

Analysis

Downloads

Data Source

Collections

- Question 6: Which genes are known to be involved in the assembly of the filopodium?
- Answer: Cdc42, Ezr and Itga6.