

## a Quick Instruction Manual for the BAH Viewer

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### I. Open a platform for searching\*

- 3D expression map images in maturation/adult stages with gene IDs,
- 2D\*\*/3D expression map images in the adult stage with gene IDs,
- 3D expression map images in the adult stage with anatomical information and
- 3D expression map images in maturation/adult stages with co-expression.

Then, select images.

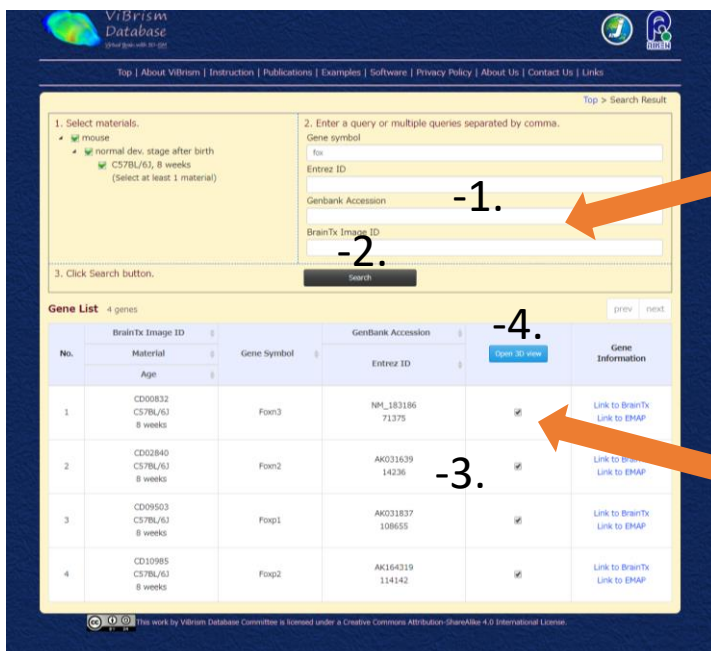
\* Full instruction manuals for searching gene expression maps on the platforms are separately available.

\*\* 2D ISH image maps are only available for the adult stage, nowadays.



Click a icon to open the platform

Fig.1 ViBrism DB top-page platforms



For searching maps of interest

- 1. type gene IDs and
- 2. click the " search " button.

Then you will see the search result.

And for selecting images

- 3. mark checks and
- 4. click the " open 3D view " button

Fig.2 an example view of selecting images

- II. Browse the selected images of
- 3D expression maps
  - 2D ISH images
  - MRI images
  - anatomical area maps
- in the BAH Viewer on the obituary planes or rectangular planes. Then, save images as a unique URL of the view.

**a.** 3D expression map

**b.** 2D ISH image

**c.** BAH controller

**d.** Anatomical area

1. Click 3D-expression map tab and see the selected gene list.

2. Change image colors if needed, using the pulldown menu.

3. Click 2D-ISH image tab and see the selected gene list.

4. click to show the image on the most proper position.

5. Change opacity of ISH images on the MRI image surface.

6. Click BAH controller tab and select background MRI images and cross-section shapes.

7. Manipulate camera positions.

8. Click Anatomical area tab and select areas of interest using the pulldown menu.

9. Change colors, patterns and opacities, if needed.

Fig.3 Example views of images in BAH Viewer

-10. click for a full screen view

	species	strain	age	sex
material	mouse	C57BL/6J	8 weeks	M

A URL to restore the state of this page:

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-11. Drag for plane rotation

-12. Drag for plane sliding

Fig. 4 Manipulating 3D images in the BAH Viewer with the obituary plane

-15. Click to generate an unique URL of this view for restoring it.

Ex. view at <https://vibrism.neuroinf.jp/setsearch/3d/view/Cx1/65374d6a88800683ed5f366b95305d55>

	species	strain	age	sex
material	mouse	C57BL/6J	8 weeks	M

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-13. Drag the white frame to rotate the brain.

-14. Drag the green frame and move the cube in any directions

Fig.5 Manipulating 3D images in the BAH Viewer with rectangular planes