

CLAIMS

1. A system for detecting an inhibitory circuit of a brain, the system comprising:
a detection device that detects a brain activity;
5 a trigger output device that applies a first trigger that is a stimulus or a task for a living body, and a second trigger that can change a first brain activity induced by an application of the first trigger;
means for acquiring first brain activity information on the first brain activity;
means for acquiring second brain activity information on a second brain activity
10 induced by the application of the first trigger which is accompanied by the application of the second trigger;
means for detecting a response in the first brain activity induced by the application of the second trigger based on the first brain activity information and the second brain activity information; and
15 means for selecting a type of the inhibitory circuit to be inputted according to a timing of the application of the second trigger in advance of the application of the first trigger to evaluate the response as an indicator of an action of the inhibitory circuit.
2. The system according to claim 1, wherein the inhibitory circuit is one or both of a
20 GABA-A mediating inhibitory circuit and a GABA-B mediating inhibitory circuit.
3. The system according to claim 1 or 2, wherein the inhibitory circuit comprises a GABA-A-ergic inhibitory interneuron or a GABA-B-ergic inhibitory interneuron.
- 25 4. The system according to claim 3, wherein the inhibitory circuit is a GABA-A-ergic inhibitory interneuron formed by a basket cell and/or an inhibitory circuit mediated by a Martinotti cell.
5. The system according to any one of claims 1 to 4, wherein a receptor related to the
30 inhibitory circuit is one or more of GABA-A receptor, GABA-B receptor, and GABA receptor.