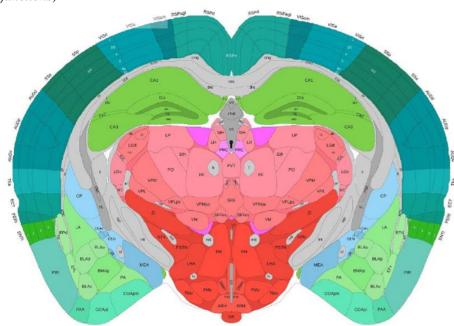
## Prompt 1:

This image is an adult mouse coronal region transcent. Assume you are a senior brain scientist in the prestigious Allen Institute, identify all brain regions (DO NOT OMIT ANYONE even considering the page limit) including their acronym names on the image, their corresponding full names, and their basic information (e.g., structural features, and functions)



## **GPT-4V:**

The image you've shared depicts a detailed map of an adult mouse coronal brain section. Recognizing every structure would be exhaustive. I'll try my best to identify as many regions as I can, but please note that this may not be an exhaustive list and might not cover all structures in the detail you might expect from a senior brain scientist at the Allen Institute. Here's a breakdown:

## 1. **RSP**: Retrosplenial Cortex

- Function: Involved in a variety of cognitive functions, including episodic memory, navigation, and
  - the processing of spatial, contextual, and emotional information. **Structural features**: Located posteriorly in the parietal lobe.
  - VIS: Visual Cortex (Multiple areas like VISam, VISrl, etc.)
    - **Function**: Processes visual information.
    - Structural features: Located in the occipital lobe.
- CA1, CA3: Regions of Hippocampus
  - Function: Important for memory and navigation.
  - **Structural features**: The hippocampus is a major component of the brain of humans and other
  - vertebrates. It belongs to the limbic system and plays important roles in the consolidation of information from short-term memory to long-term memory, and in spatial memory that enables navigation.

## **DG**: Dentate Gyrus

- Function: Part of the hippocampal formation, and it is thought to contribute to the formation of new episodic memories and the spontaneous exploration of novel environments.
- Structural features: A layer of granule cells making up one of the two primary regions of the hippocampus.
- 5. **LP**: Lateral Posterior Nucleus