

# Software Development Kit (AllenSDK)

## Software Development Kit

### Accessing Allen Brain Observatory data

The [AllenSDK](#) is a Python package that facilitates downloading and manipulating Allen Institute data sets. Using the AllenSDK, Allen Brain Observatory experimental data can be retrieved in the Neurodata Without Borders (NWB) file format. The AllenSDK enables deep, custom data analysis by providing utilities for accessing experimental metadata, extracting cell fluorescence traces, and more. It also contains the codebase used to process, quantify, and visualize the data available in Allen Brain Observatory data portal. This includes scripts for:

- neuropil subtraction
- dF/F computation
- stimulus-specific tuning analysis

### Getting Started with the AllenSDK

Get started [here](#) with the AllenSDK. Users are strongly encouraged to walk through the main [Jupyter Notebook](#) for an overview of the available functionality. For example:

- [Download the data for an experiment by ID](#)
- [Download the data for a specific cell by ID](#)
- [Plot fluorescence traces for a cell stimulus response](#)