

To create an AutoDock configuration file for docking molecules to the CB1 receptor using the provided residues and their coordinates, you can use the following template:

```
...  
# AutoDock Configuration File  
  
[receptor]  
receptor_file = cb1_receptor.pdbqt  
  
[ligand]  
ligand_file = ligand.pdbqt  
  
[docking]  
ligand_atom_types = A C HD N NA OA SA  
receptor_atom_types = A C HD N NA OA SA  
  
[bindingsite]  
bindingsite_center_x = <center_x>  
bindingsite_center_y = <center_y>  
bindingsite_center_z = <center_z>  
bindingsite_size_x = <size_x>  
bindingsite_size_y = <size_y>  
bindingsite_size_z = <size_z>  
  
[exhaustiveness]  
exhaustiveness = 8  
  
...
```

Replace ``<center_x>``, ``<center_y>``, ``<center_z>``, ``<size_x>``, ``<size_y>``, and ``<size_z>`` with the appropriate values for the binding site coordinates and size.

For example, using the coordinates provided for each residue:

For Residue F200:

- ``<center_x>`` = 39.115
- ``<center_y>`` = 35.254
- ``<center_z>`` = 309.278

For Residue H264:

- ``<center_x>`` = 35.217
- ``<center_y>`` = 38.083
- ``<center_z>`` = 330.111

For Residue W279:

- ``<center_x>`` = 32.475
- ``<center_y>`` = 39.468
- ``<center_z>`` = 315.546

You can also adjust the ``exhaustiveness`` parameter as needed, which controls the thoroughness of the docking search.

Save the configuration file with the desired name, such as ``autodock.conf``, and make sure to replace ``cb1_receptor.pdbqt`` with the filename of the CB1 receptor's PDBQT file.

With this configuration file, you can run AutoDock using the ``autodock.conf`` file as a parameter to specify the docking settings and the receptor-ligand files.