

Fly Brain Anatomical Orientation Analysis Report

Generated on: February 13, 2026

This report contains analysis of fly brain microscopy images, including template characteristics, sample orientation detection, and correction results.

Template Analysis Results

Template: JRC2018U_template

Physical Dimensions: $627.9 \times 293.7 \times 174.0 \mu\text{m}$

Voxel Resolution: $0.519 \times 0.519 \times 1.000 \mu\text{m}$

Data Range: 0-255

Maximum Intensity Projections:

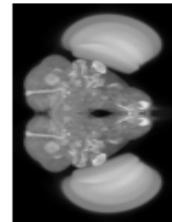
JRC2018U_template
X-Y (Dorsal)



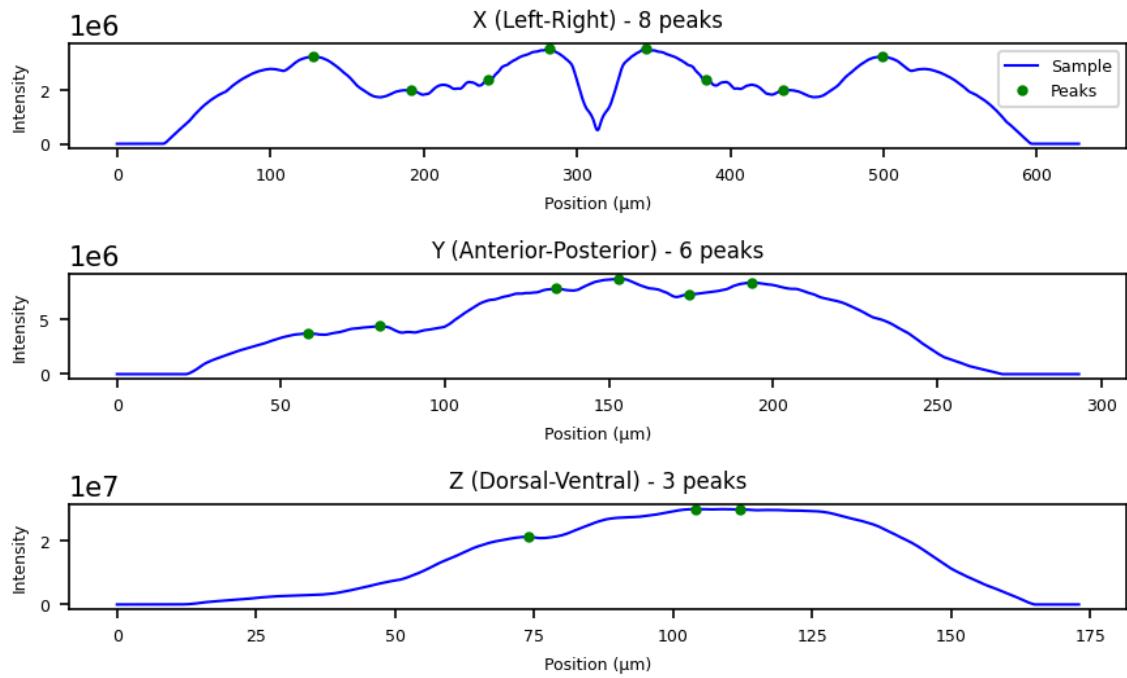
JRC2018U_template
X-Z (Lateral)



JRC2018U_template
Y-Z (Anterior)



JRC2018U_template Projection Analysis



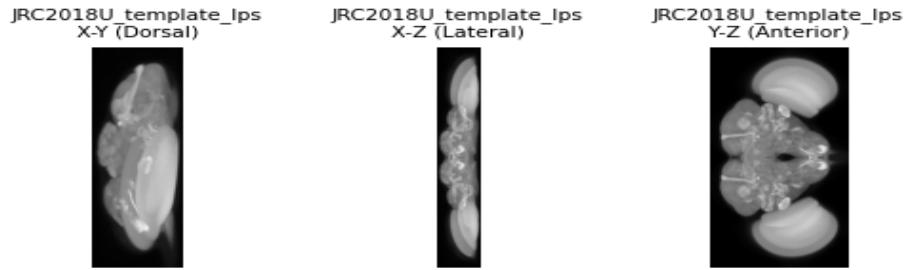
Template: JRC2018U_template_lps

Physical Dimensions: $627.9 \times 293.7 \times 174.0 \mu\text{m}$

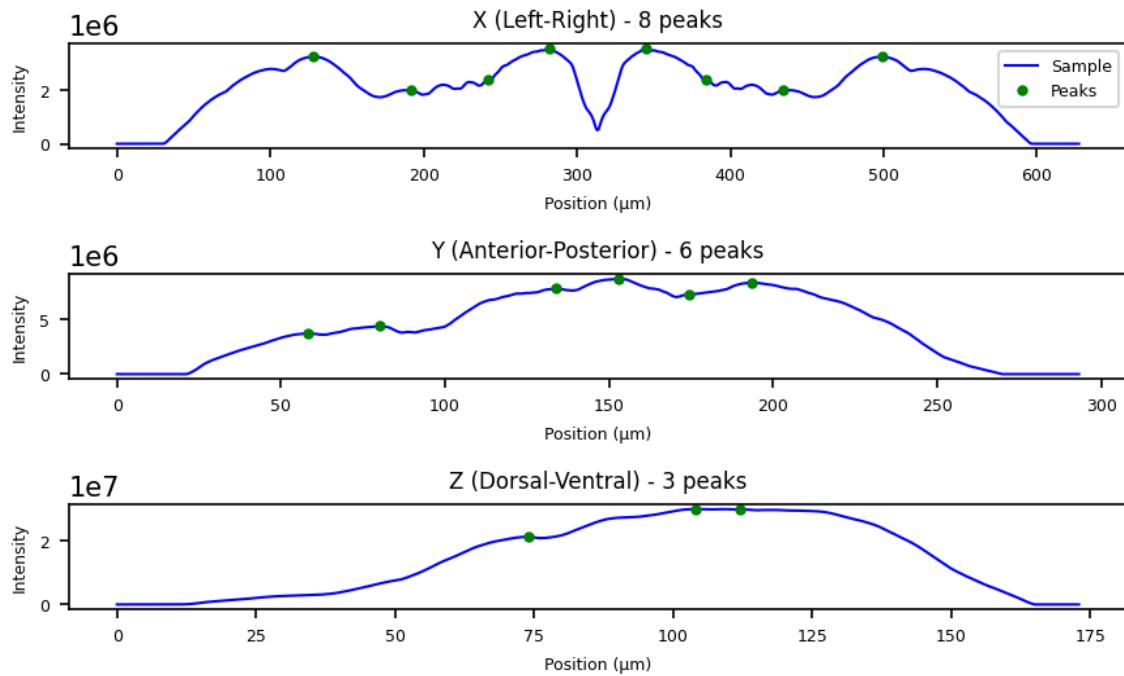
Voxel Resolution: $0.519 \times 0.519 \times 1.000 \mu\text{m}$

Data Range: 0-255

Maximum Intensity Projections:



JRC2018U_template_lps Projection Analysis



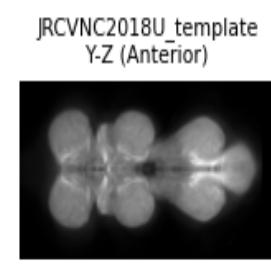
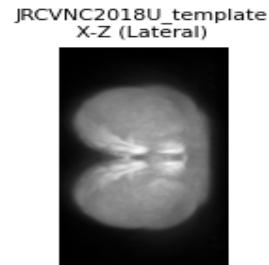
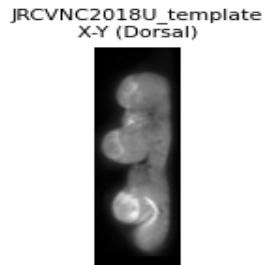
Template: JRCVNC2018U_template

Physical Dimensions: $264.0 \times 516.0 \times 152.8 \mu\text{m}$

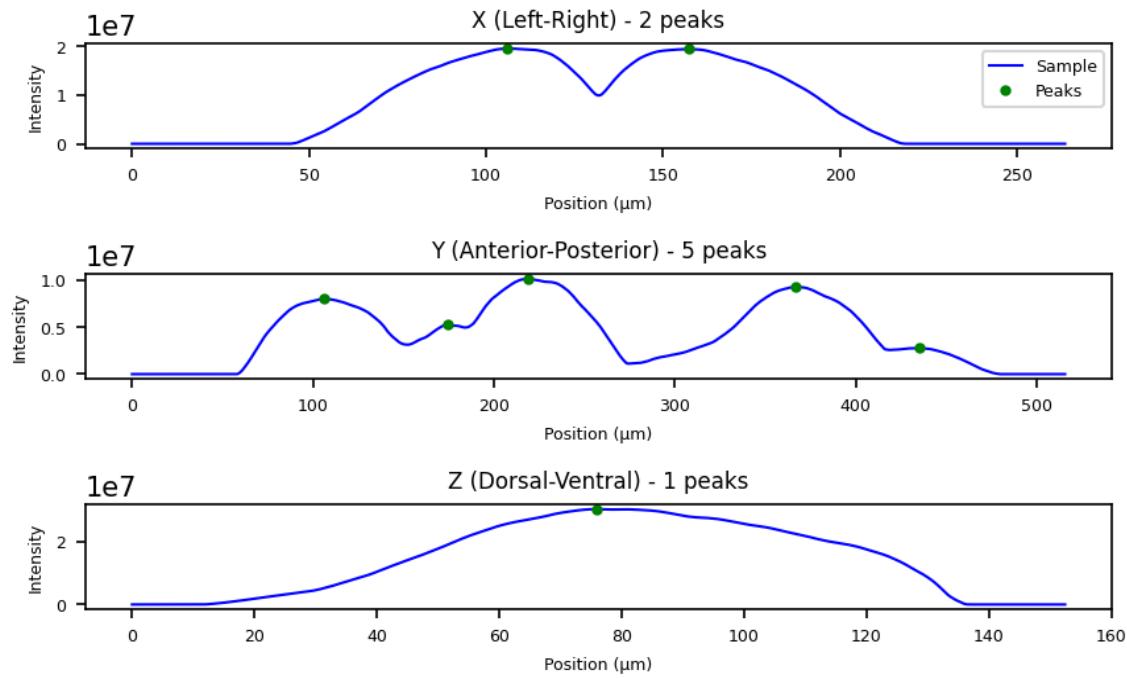
Voxel Resolution: $0.400 \times 0.400 \times 0.400 \mu\text{m}$

Data Range: 0-255

Maximum Intensity Projections:



JRCVNC2018U_template Projection Analysis



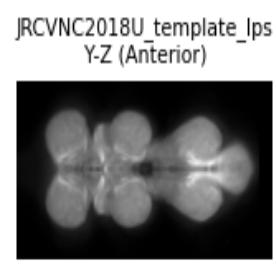
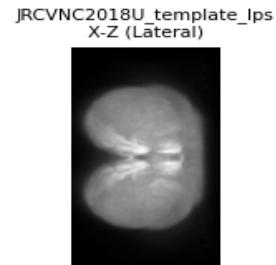
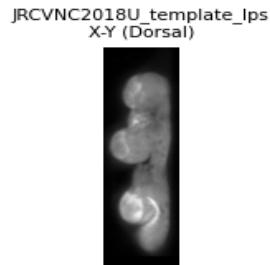
Template: JRCVNC2018U_template_lps

Physical Dimensions: $264.0 \times 516.0 \times 152.8 \mu\text{m}$

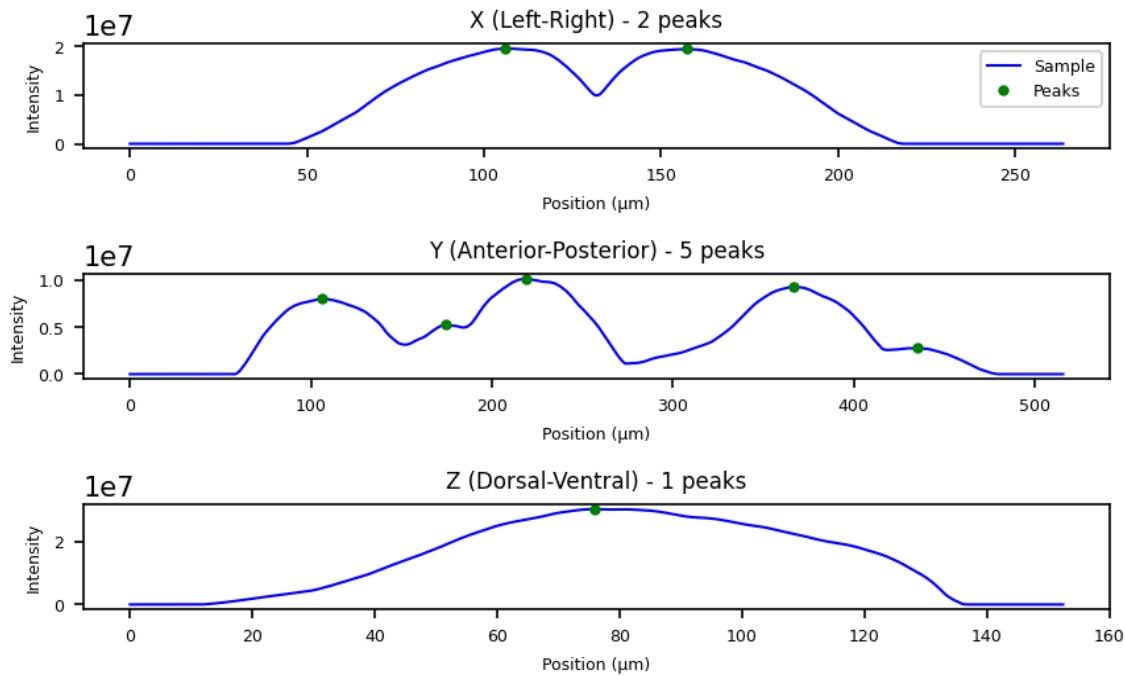
Voxel Resolution: $0.400 \times 0.400 \times 0.400 \mu\text{m}$

Data Range: 0-255

Maximum Intensity Projections:



JRCVNC2018U_template_lps Projection Analysis



Sample Analysis Results

Sample: Brain_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3_background

Template Used: JRC2018U_template_lps

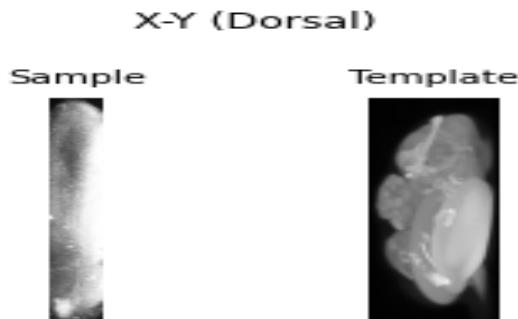
Physical Dimensions: $387.9 \times 387.9 \times 112.6 \mu\text{m}$

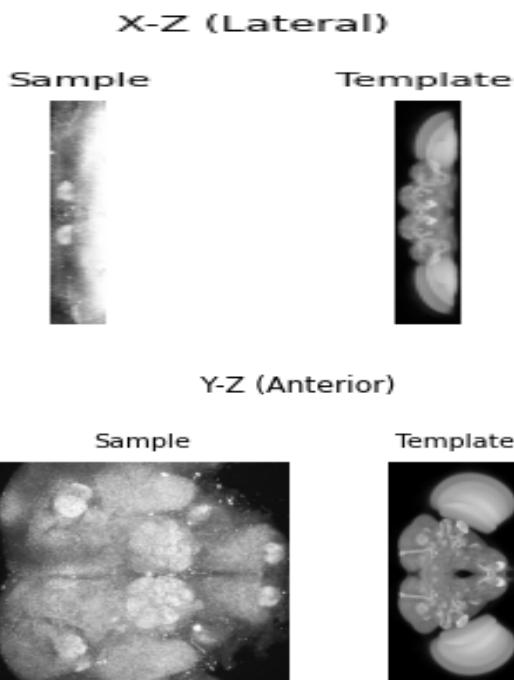
Voxel Resolution: $0.379 \times 0.379 \times 0.901 \mu\text{m}$

Orientation Correct: No

Changes Needed: 90° rotation (X-Y swap)

Maximum Intensity Projections Comparison (Sample vs Template):





Signal Channel Projections:

Brain_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3_background Signal
XY (Dorsal)



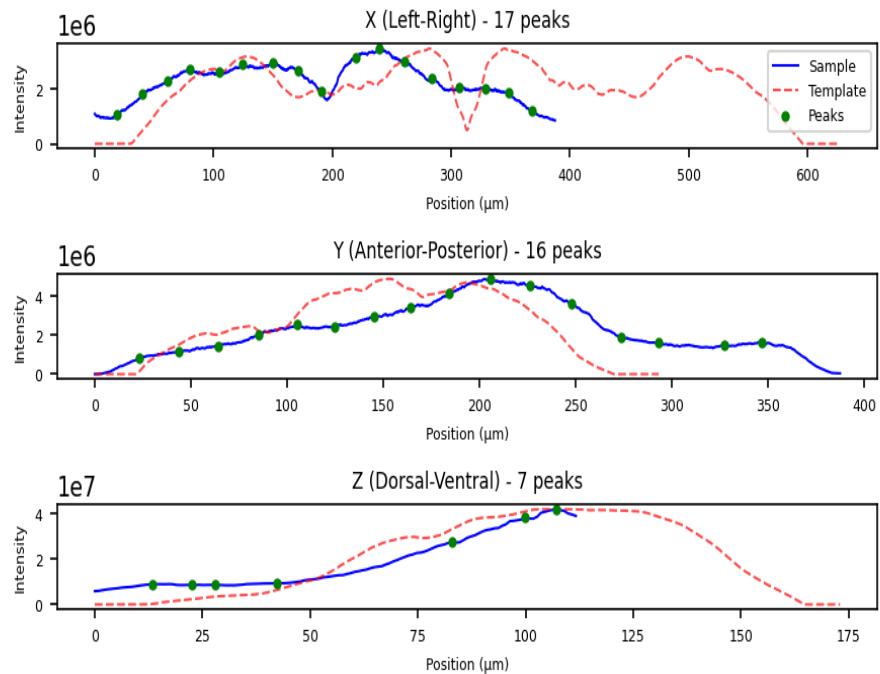
Brain_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3_background Signal
XZ (Lateral)



Brain_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3_background Signal
YZ (Anterior)



Brain_SPR8AD.dsxDDB.FB1.1.Nc82.Brain.40x.3_background vs JRC2018U_template_lps Projection Analysis



Sample: VNC_SPR8AD.FD6DBD_FB1.1_nc82647_S1_background

Template Used: JRCVNC2018U_template

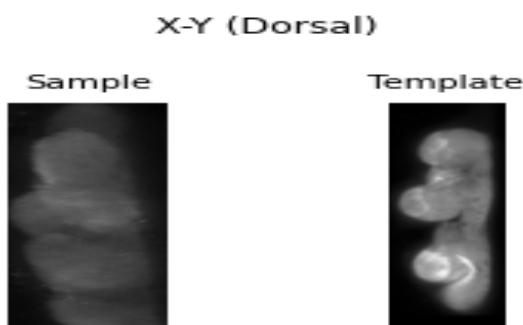
Physical Dimensions: $387.9 \times 387.9 \times 126.3 \mu\text{m}$

Voxel Resolution: $0.379 \times 0.379 \times 0.300 \mu\text{m}$

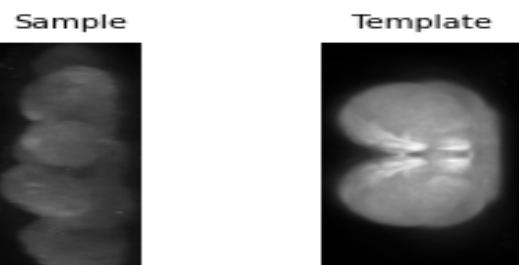
Orientation Correct: Yes

Changes Needed: None

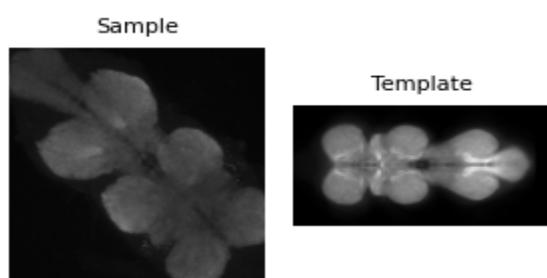
Maximum Intensity Projections Comparison (Sample vs Template):



X-Z (Lateral)



Y-Z (Anterior)



Signal Channel Projections:

VNC_SPR8AD.F06DBD_F01.1_nc82647_S1_background Signal
XY (Dorsal)



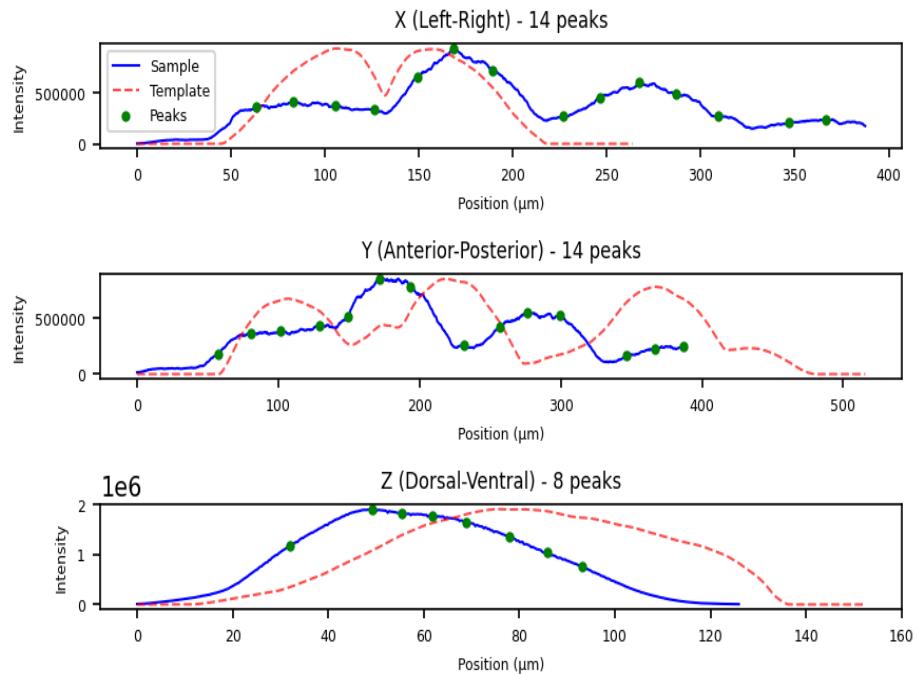
VNC_SPR8AD.F06DBD_F01.1_nc82647_S1_background Signal
XZ (Lateral)



VNC_SPR8AD.F06DBD_F01.1_nc82647_S1_background Signal
YZ (Anterior)



VNC_SPR8AD.FD6DBD_FBF1.1_nc82647_S1_background vs JRCVNC2018U_template Projection Analysis



Sample:

VNC_Fru11.12AD.dsxDBD.FB1.1.Brain.40x.8.composite_background

Template Used: JRCVNC2018U_template

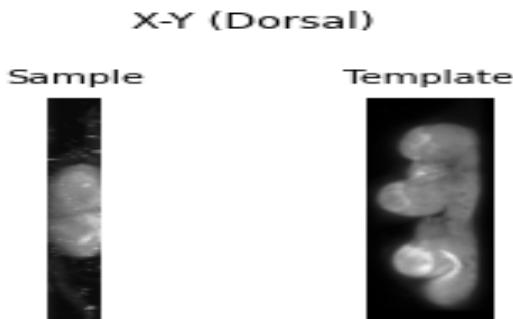
Physical Dimensions: $612.4 \times 612.4 \times 117.1 \mu\text{m}$

Voxel Resolution: $0.598 \times 0.598 \times 0.901 \mu\text{m}$

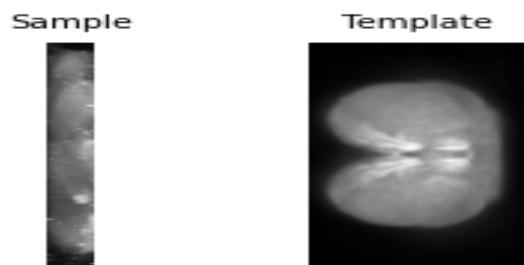
Orientation Correct: Yes

Changes Needed: None

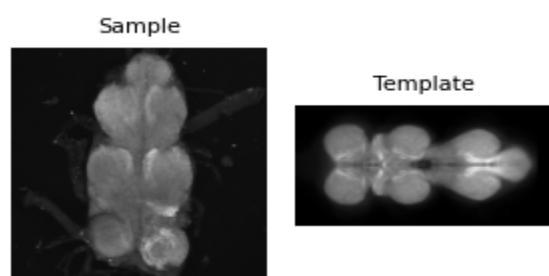
Maximum Intensity Projections Comparison (Sample vs Template):



X-Z (Lateral)



Y-Z (Anterior)



Signal Channel Projections:

VNC_Fru112AD.dsxOBD.FB1.1Brain.40x.8.composite_background.Signal
XY (Dorsal)



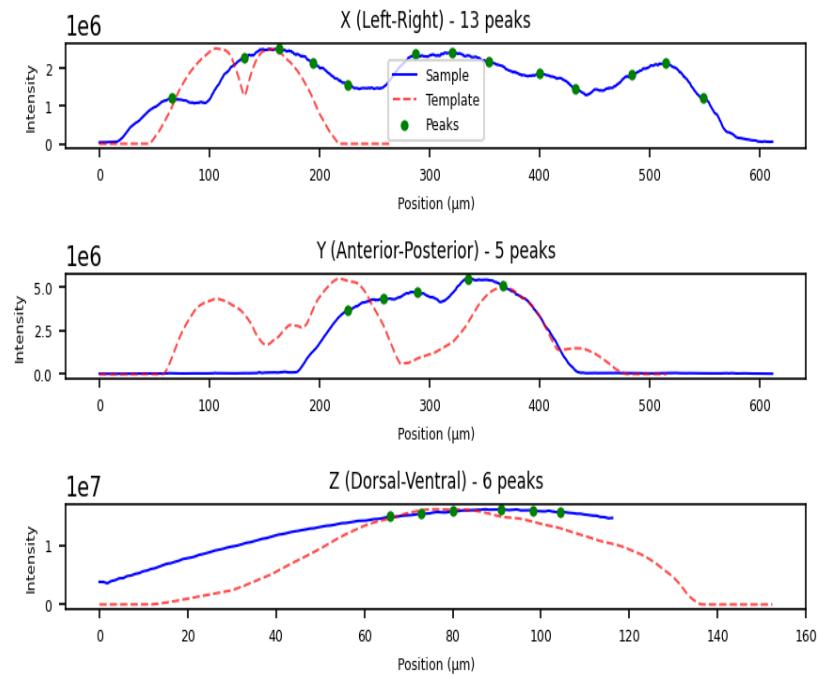
VNC_Fru112AD.dsxOBD.FB1.1Brain.40x.8.composite_background.Signal
XZ (Lateral)



VNC_Fru112AD.dsxOBD.FB1.1Brain.40x.8.composite_background.Signal
YZ (Anterior)



VNC_Fru11.12AD.dsxDBD.FB1.1.Brain.40x.8.composite_background vs JRCVNC2018U_template Projection Analysis



Sample: VNC_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3_background

Template Used: JRCVNC2018U_template

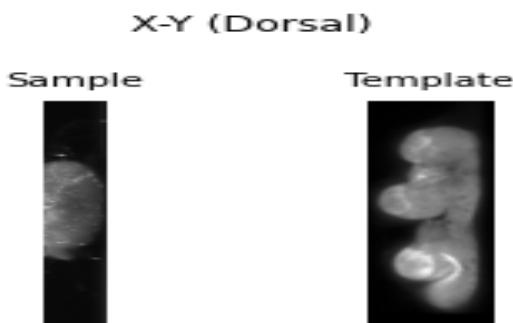
Physical Dimensions: $612.4 \times 612.4 \times 137.8 \mu\text{m}$

Voxel Resolution: $0.598 \times 0.598 \times 0.901 \mu\text{m}$

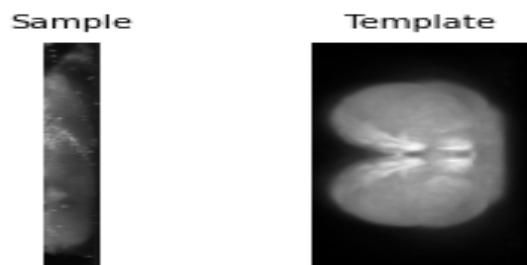
Orientation Correct: Yes

Changes Needed: None

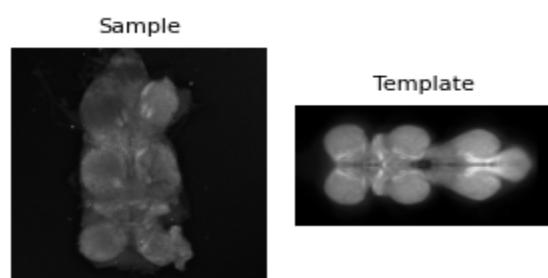
Maximum Intensity Projections Comparison (Sample vs Template):



X-Z (Lateral)



Y-Z (Anterior)



Signal Channel Projections:

VNC_SPR8AD.dsxBDB.FB1.1.Nc82.Brain.40x.3_background Signal
XY (Dorsal)



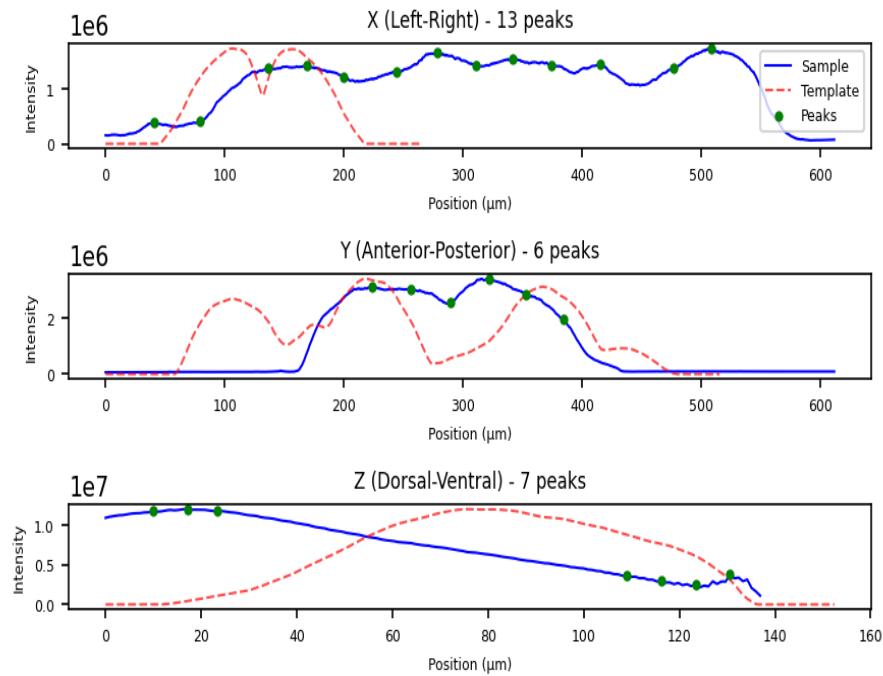
VNC_SPR8AD.dsxBDB.FB1.1.Nc82.Brain.40x.3_background Signal
XZ (Lateral)



VNC_SPR8AD.dsxBDB.FB1.1.Nc82.Brain.40x.3_background Signal
YZ (Anterior)



VNC_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3_background vs JRCVNC2018U_template Projection Analysis



Sample: VNC_Fru11.12AD_FD6DBD_FB1.1_NC82_S1_background

Template Used: JRCVNC2018U_template

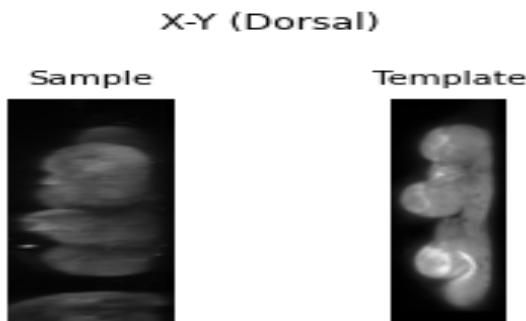
Physical Dimensions: $596.3 \times 596.3 \times 133.5 \mu\text{m}$

Voxel Resolution: $0.582 \times 0.582 \times 0.300 \mu\text{m}$

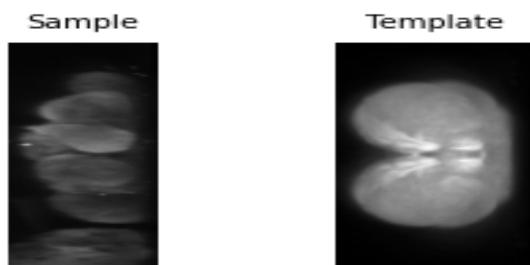
Orientation Correct: Yes

Changes Needed: None

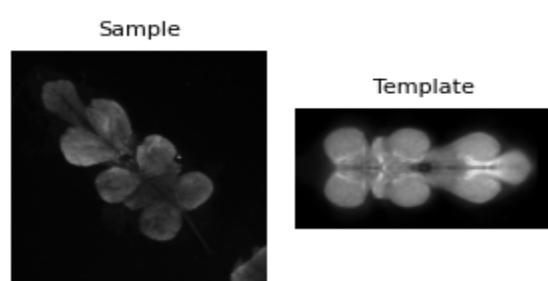
Maximum Intensity Projections Comparison (Sample vs Template):



X-Z (Lateral)

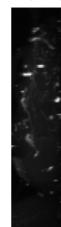


Y-Z (Anterior)

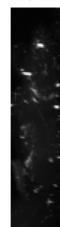


Signal Channel Projections:

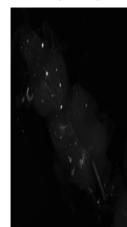
VNC_Fru11.12AD_FD60BD_FB11_NC82_S1_background Signal
XY (Dorsal)



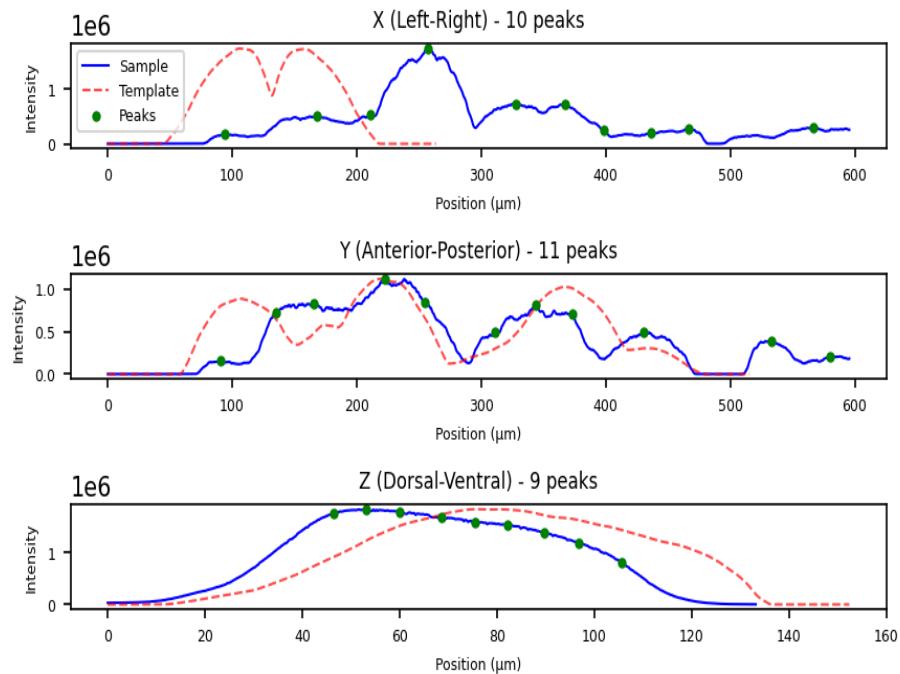
VNC_Fru11.12AD_FD60BD_FB11_NC82_S1_background Signal
XZ (Lateral)



VNC_Fru11.12AD_FD60BD_FB11_NC82_S1_background Signal
YZ (Anterior)



VNC_Fru11.12AD_FD6DBD_FB1.1_NC82_S1_background vs JRCVNC2018U_template Projection Analysis



Sample: Fru11.12AD.dsxDDB.FB1.1.Brain.40x.8.composite_background

Template Used: JRC2018U_template_lps

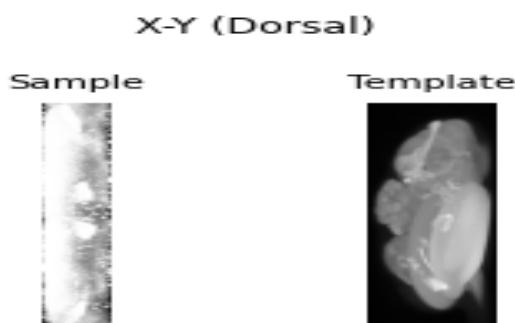
Physical Dimensions: $387.9 \times 387.9 \times 147.7 \mu\text{m}$

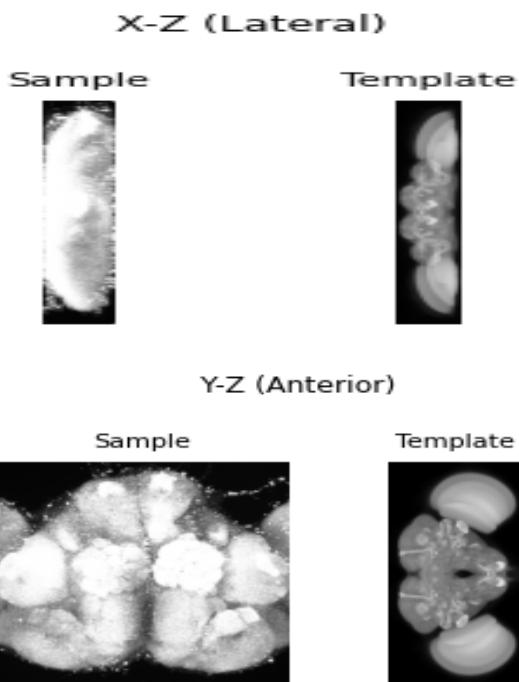
Voxel Resolution: $0.379 \times 0.379 \times 0.901 \mu\text{m}$

Orientation Correct: No

Changes Needed: 90° rotation (X-Y swap)

Maximum Intensity Projections Comparison (Sample vs Template):





Signal Channel Projections:

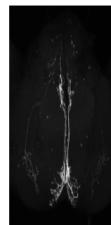
Fru11.12AD.dsxBDB.FB1.1.Brain.40x.8.composite_background.Signal
XY (Dorsal)



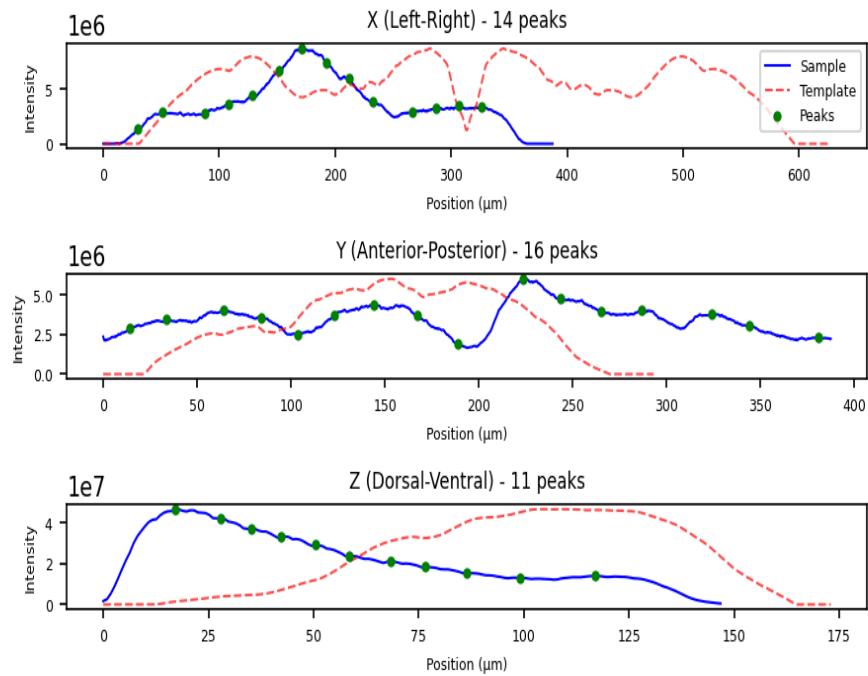
Fru11.12AD.dsxBDB.FB1.1.Brain.40x.8.composite_background.Signal
XZ (Lateral)



Fru11.12AD.dsxBDB.FB1.1.Brain.40x.8.composite_background.Signal
YZ (Anterior)



Fru11.12AD.dsxDBD.FB1.1.Brain.40x.8.composite_background vs JRC2018U_template_lps Projection Analysis



Sample: Brain_SPR8AD.FD6DBD_FB1.1_nc82647_S1_background

Template Used: JRC2018U_template_lps

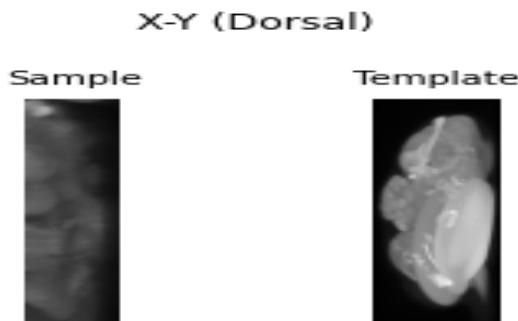
Physical Dimensions: $368.2 \times 368.2 \times 70.8 \mu\text{m}$

Voxel Resolution: $0.360 \times 0.360 \times 0.300 \mu\text{m}$

Orientation Correct: No

Changes Needed: 90° rotation (X-Y swap)

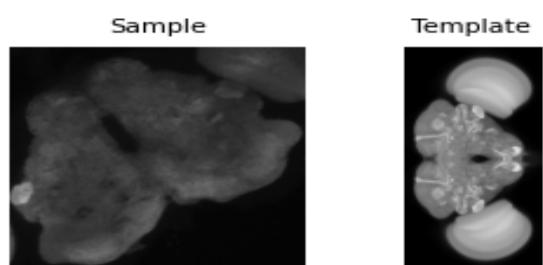
Maximum Intensity Projections Comparison (Sample vs Template):



X-Z (Lateral)



Y-Z (Anterior)



Signal Channel Projections:

Brain_SPR8AD.FD6DBD_F81.1_nc82647_S1_background Signal
XY (Dorsal)



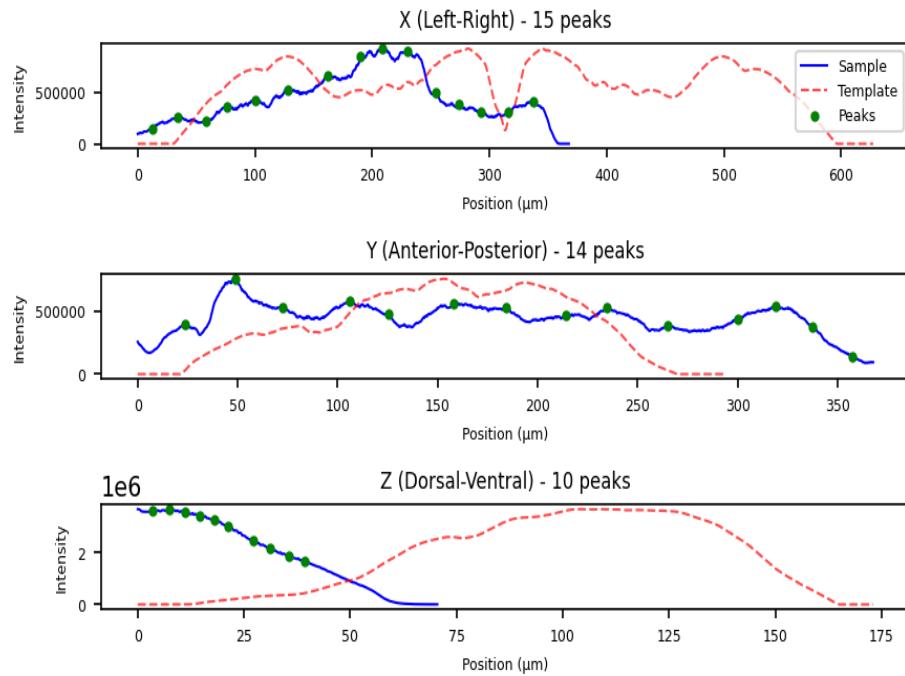
Brain_SPR8AD.FD6DBD_F81.1_nc82647_S1_background Signal
XZ (Lateral)



Brain_SPR8AD.FD6DBD_F81.1_nc82647_S1_background Signal
YZ (Anterior)



Brain_SPR8AD.FD6DBD_FB1.1_nc82647_S1_background vs JRC2018U_template_lps Projection Analysis



Sample:

VNC_SPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite_background

Template Used: JRCVNC2018U_template

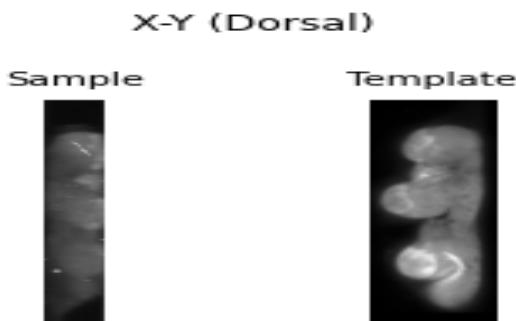
Physical Dimensions: $646.5 \times 646.5 \times 126.1 \mu\text{m}$

Voxel Resolution: $0.631 \times 0.631 \times 0.901 \mu\text{m}$

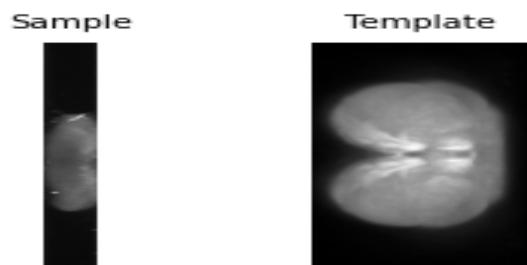
Orientation Correct: Yes

Changes Needed: None

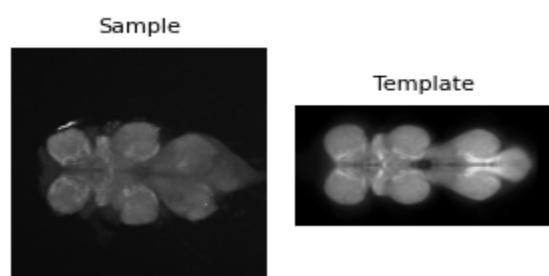
Maximum Intensity Projections Comparison (Sample vs Template):



X-Z (Lateral)



Y-Z (Anterior)



Signal Channel Projections:

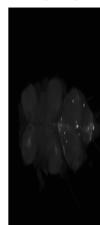
VNC_SPR840.Fru11.120BD.FB1.1.NC82.Brain.40x1.composite_background.Signal
XY (Dorsal)



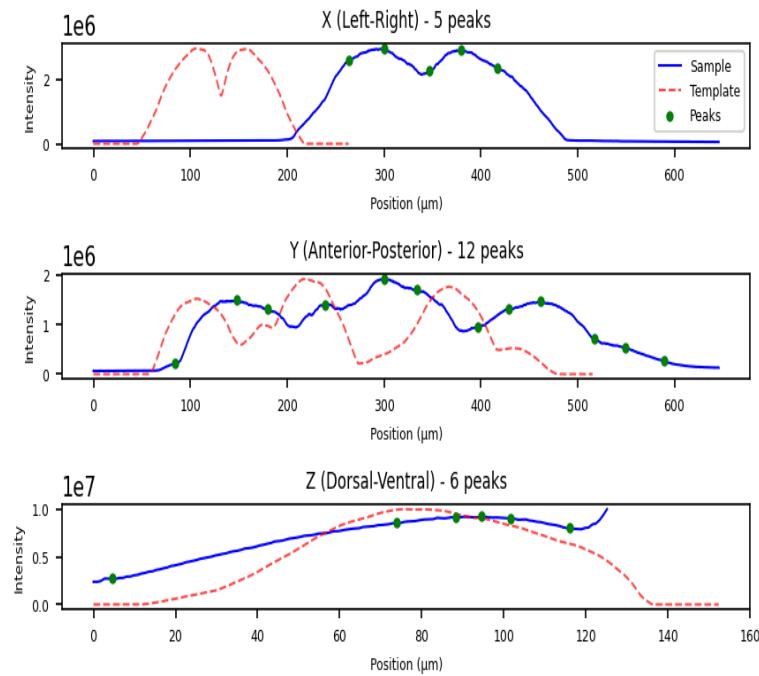
VNC_SPR840.Fru11.120BD.FB1.1.NC82.Brain.40x1.composite_background.Signal
XZ (Lateral)



VNC_SPR840.Fru11.120BD.FB1.1.NC82.Brain.40x1.composite_background.Signal
YZ (Anterior)



VNC_SPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite_background vs JRCVNC2018U_template Projection Analysis



Sample:

BrainSPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite_background

Template Used: JRC2018U_template_lps

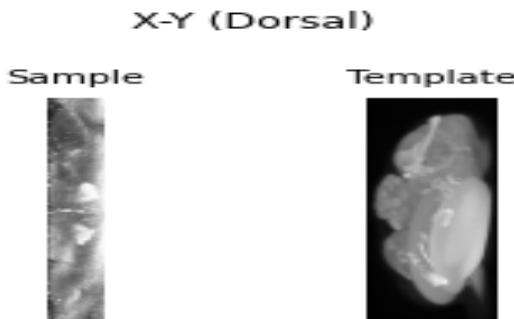
Physical Dimensions: $387.9 \times 387.9 \times 118.0 \mu\text{m}$

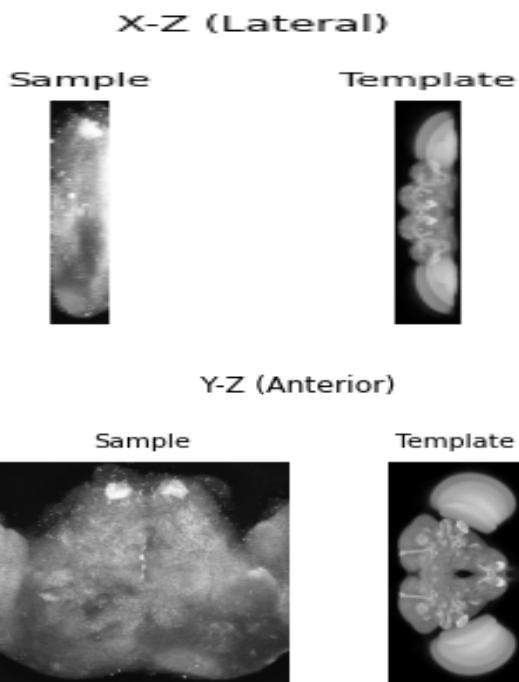
Voxel Resolution: $0.379 \times 0.379 \times 0.901 \mu\text{m}$

Orientation Correct: No

Changes Needed: 90° rotation (X-Y swap)

Maximum Intensity Projections Comparison (Sample vs Template):

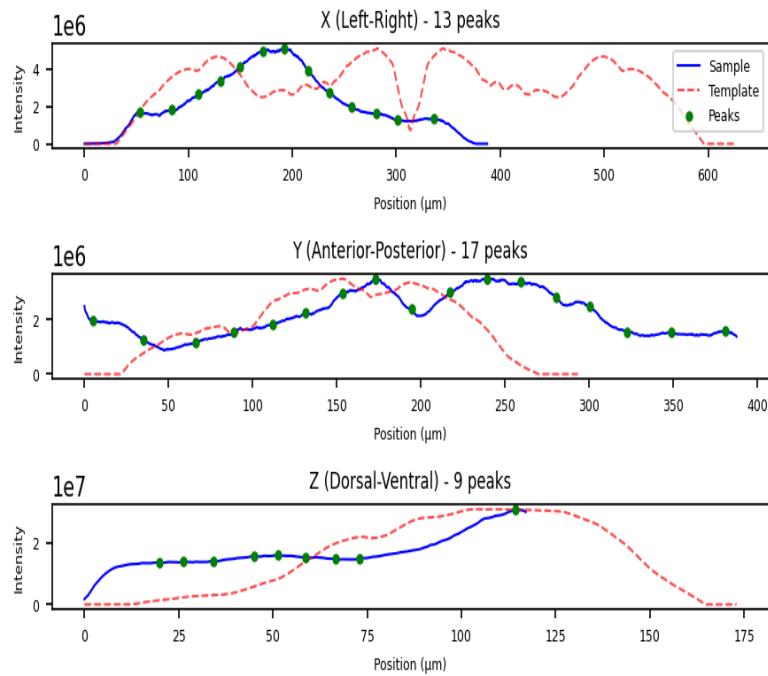




Signal Channel Projections:



BrainSPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite_background vs JRC2018U_template_lps Projection Analysis



Sample: Brain_Fru11.12AD_FD6DBD_FB1.1_NC82_S1_background

Template Used: JRC2018U_template_lps

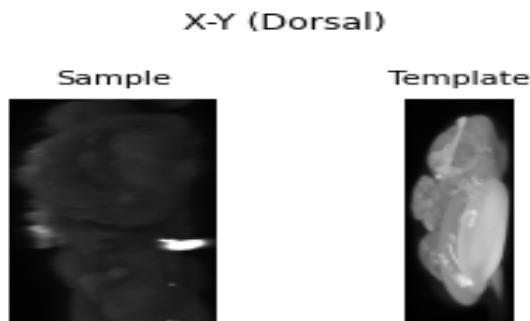
Physical Dimensions: $313.4 \times 313.4 \times 179.4 \mu\text{m}$

Voxel Resolution: $0.306 \times 0.306 \times 0.300 \mu\text{m}$

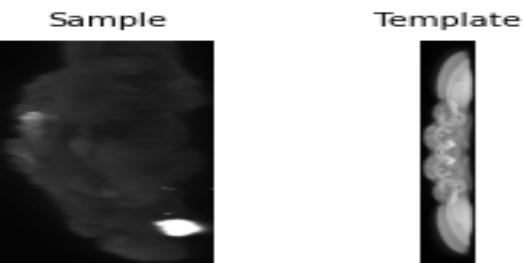
Orientation Correct: No

Changes Needed: 90° rotation (X-Y swap)

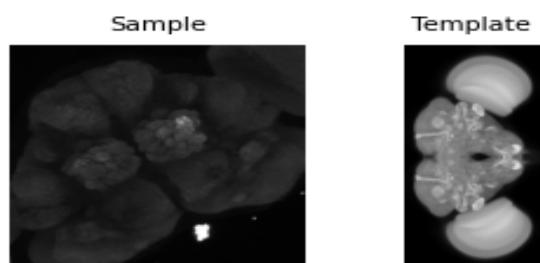
Maximum Intensity Projections Comparison (Sample vs Template):



X-Z (Lateral)

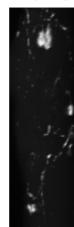


Y-Z (Anterior)



Signal Channel Projections:

Brain_Fru11.12AD_FD6DBD.FB1.1_NC82_S1_background Signal
XY (Dorsal)



Brain_Fru11.12AD_FD6DBD.FB1.1_NC82_S1_background Signal
XZ (Lateral)



Brain_Fru11.12AD_FD6DBD.FB1.1_NC82_S1_background Signal
YZ (Anterior)



Brain_Fru11.12AD_FD6DBD_FB1.1_NC82_S1_background vs JRC2018U_template_lps Projection Analysis

