

Training settings in Microscopy Image Browser	
Workflow	2D Semantic
Architecture	U-Net
File extension for training images	.tif
Index (Training images)	1
File extension for prediction images	.tif
Index (Prediction images)	1
Model Extension	.png
Number of Classes	2
Use parallel processing	Yes
Workers	6
Fraction of images for Validation	0.03
Random generator seed	0
Preprocess for	Training and Prediction
Network design	
Input Patch Size	256 256 1 3
Padding	Same
Filter	16
Filter Size	3
Input Layer	RescaleToZero
Activation Layer	reluLayer
Segmentation Layer	dicePixelCustumClassification
Augmentation Design	2D
Fraction	0.75
FillValue	255
RandXReflection	1 0.3
RandYReflection	1 0.3
Rotation 90	1 0.3
ReflectedRotation 90	1 0.3
RandRotation	-10 10 0.3
RandScale	1 1.1 0.3
RandXScale	1 1.1 0.3
RandYScale	1 1.1 0.3
RandXShear	-10 10 0.3
RandYShear	-10 10 0.3
GaussianNoise	0 0.5
PoissonNoise	0 0.05
HueJiffer	-0.03 0.03 0.3
SaturationJitter	-0.05 0.05 0.3
BrightnessJitter	-0.1 0.1 0.3
ContrastJitter	0.9 1.1 0.3
ImageBlur	0 0.5 0.3
Training Process Design	
Patches per Image	1
Mini Batch Size	16
Random Seed	0
Training Settings	
SolverName	Adam
MaxEpochs	200
Shuffle	every-epoch
InitialLearnRate	0.0001
LearnRateSchedule	none
L2Regularization	0.0001
Decay rate of gradient moving average	0.9
Decay rate of squared gradient moving average	0.999
ValidationFrequency	0.1
Patience of validation stopping of network training	150
Plots	Training-progress

OutputNetwork	Last-iteration
Frequency of saving checkpoint networks in epochs	1
Downsampling Factor	2
Prediction Settings	
Prediction engine	Blocked-Image
Batch Size for Prediction	32
Model files	MIB Model format
Score files	Do not generate