

Colocalization Analysis Report

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20240212_CKR_E10B_mHtt-HAQ97doxy48h_BafA1_HA-STAR580_CCCT1-STAR635P_A11-STAR460L_nucspotlive488_3.tif - C

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Analysis Mode: Maximum Projection

Analysis Parameters:

mHTT threshold factor: 4.0

CCT1 threshold factor: 4.5

Gaussian sigma: 3.5

Min object size: 20 pixels

mHTT color: green

CCT1 color: red

Colocalization Metrics Summary

Basic Metrics:

mHTT area: 6366 pixels

CCT1 area: 1353 pixels

Overlap area: 1239 pixels

Overlap percentage: 19.46% of mHTT, 91.57% of CCT1

1. Pearson's Correlation Coefficient:

$r = 0.3553$ (p-value: $4.67858799e-192$)

2. Manders' Coefficients:

M1 (fraction of mHTT overlapping with CCT1) = 0.2099

M2 (fraction of CCT1 overlapping with mHTT) = 0.9172

3. Dice Similarity Coefficient:

Dice = 0.3210

4. Mann-Whitney U Test:

$U = 2345287.50$

p-value = $1.84286921e-46$

5. Cohen's d (Effect Size):

$d = 0.5198$

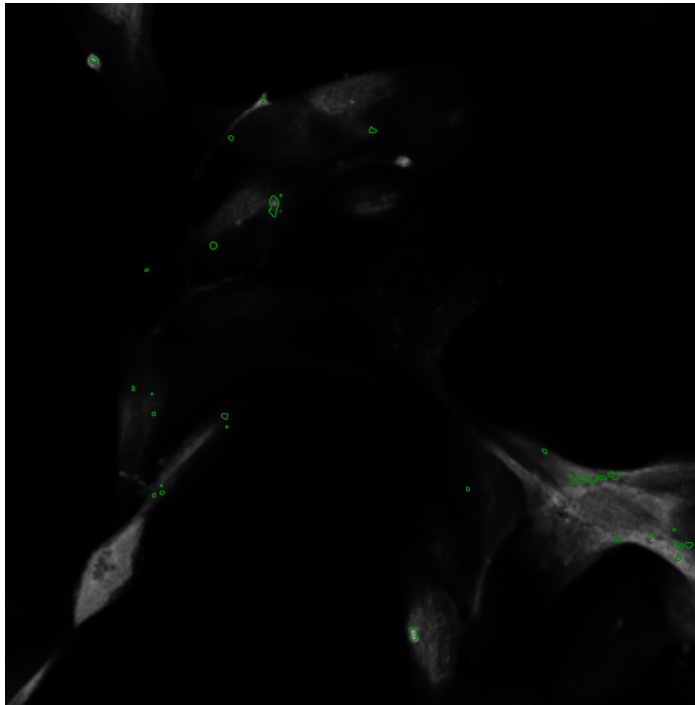
Mean intensity in overlap: 0.37

Mean intensity outside overlap: 0.34

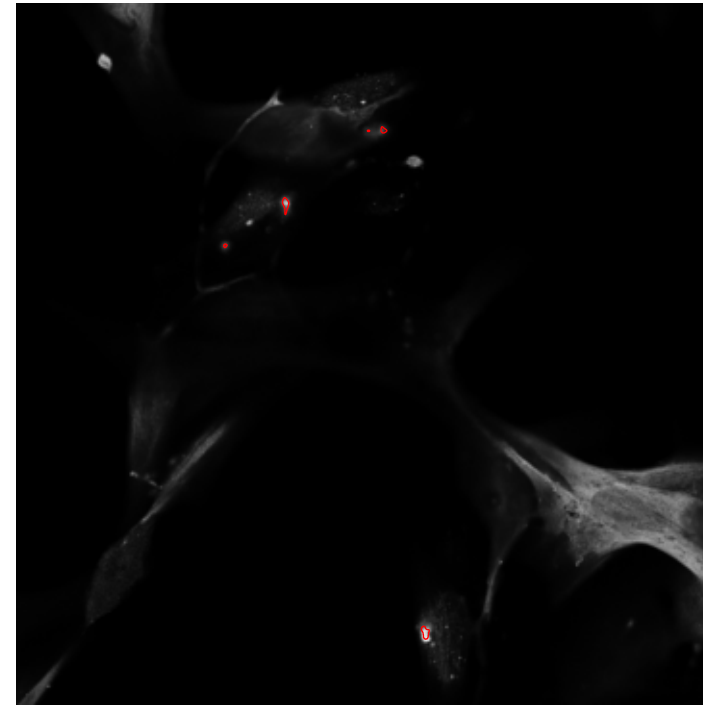
6. Intersection over Union (IoU):

$\text{IoU} = 0.1912$

mHTT Maximum Projection



CCT1 Maximum Projection



Colocalization Map

