CryoSAM: Training-free CryoET Tomogram Segmentation with Foundation Models
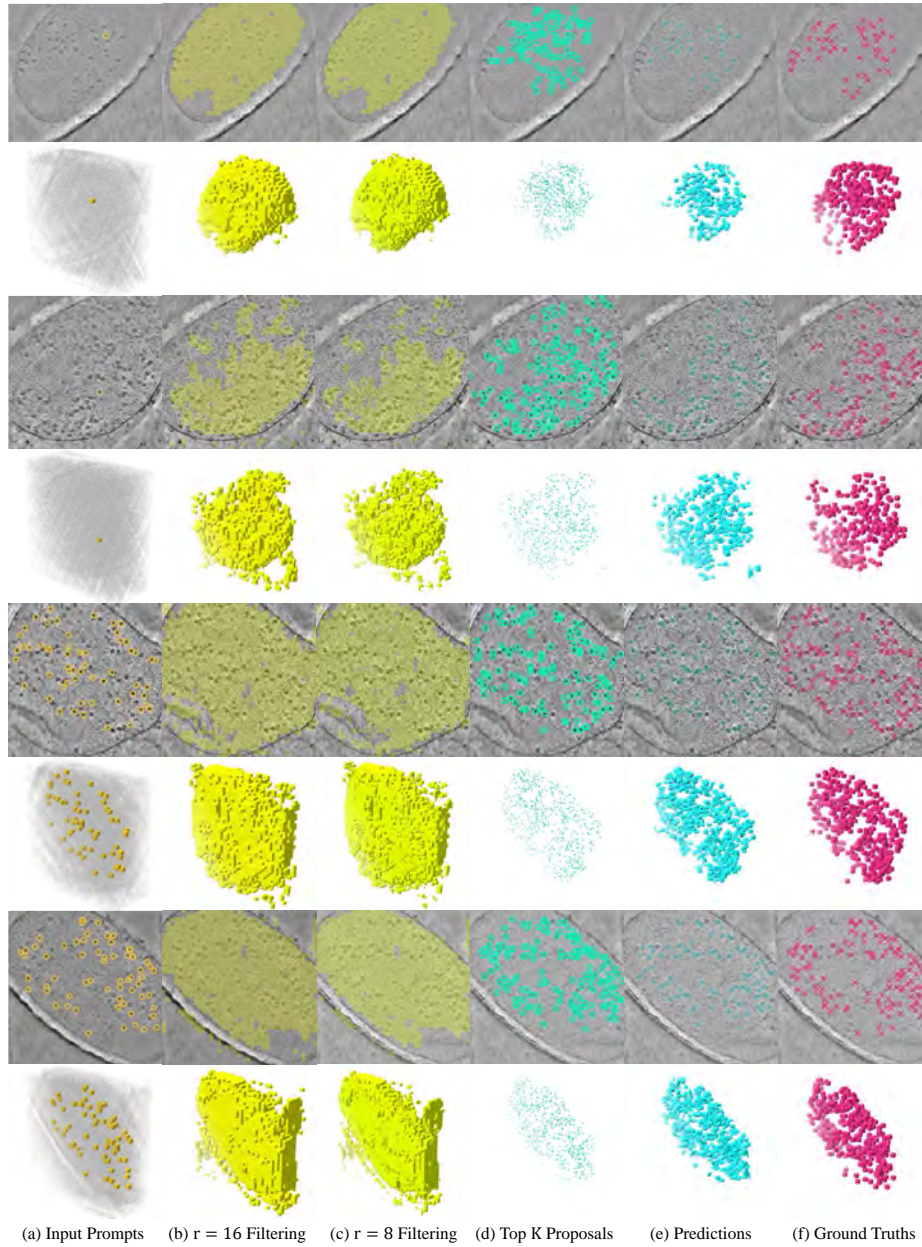
Supplementary Material

| (a) Top K Proposals | (b) Predictions | (c) Ground Truths | (d) Top K Proposals | (e) Predictions | (f) Ground Truths |
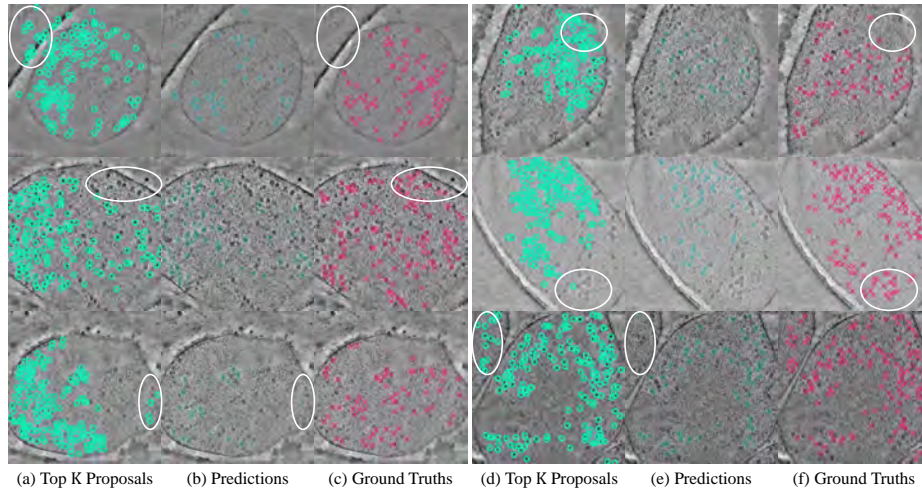
Fig. 1. Failure cases of CryoSAM. 1st row: False Positive in proposed prompts. 2nd row: False Negative in proposed prompts. 3rd row: False Negative in final predictions.

| (a) Input Prompts | (b) r = 16 Filtering | (c) r = 8 Filtering | (d) Top K Proposals | (e) Predictions |
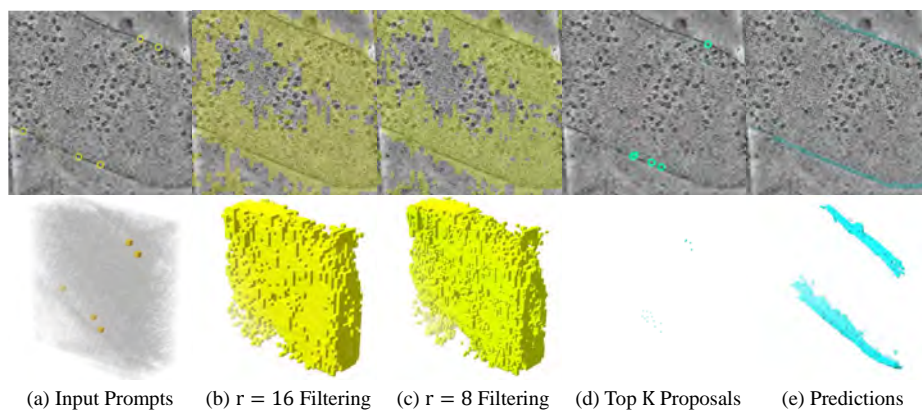
Fig. 2. Intermediate and final predictions of CryoSAM for membrane segmentation. CryoSAM can segment membranes with sparse prompt inputs.

(a) Input Prompts   (b) r = 16 Filtering   (c) r = 8 Filtering   (d) Top K Proposals   (e) Predictions   (f) Ground Truths

Fig. 3. Intermediate and final predictions of CryoSAM for particle picking.
We provide additional results for feeding CryoSAM with both single-point prompts and multiple-point prompts. In columns (a), (d), and (f), we show points with coordinates ranging from $z - 20$ to $z + 20$ for demonstration, where z is the coordinate of the visualized tomogram slice.