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[Home](#) > creating mask from a map

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## creating mask from a map

Tue, 04/23/2019 - 12:09

#1



rddey80

creating mask from a map

Dear Members,

If I don't have any known homologous structure, how can I make a mask from a manually refined map? I have now 6.9A map created by manual refinement in cistem. I like to do sharpen with mask. Can someone give any hint?

Thanks,

Raj





timgrant

Hi Raj,

Hi Raj,

For my masks, I use the method I described here :-

<https://cistem.org/manual-refine>

Thanks,

Tim



Tue, 04/23/2019 - 14:48 (Reply to #2)



rddey80

Hi Tim,

Hi Tim,

Thanks for the link. I actually tried similar way. But sharpen 3D did not improve the map quality. As I don't have any structural information, don't know how to check the reliability of the map I created in cistem. Any suggestion would be very helpful.

Thanks,

Raj





timgrant

Hi Raj,

Hi Raj,

Do you see clear alpha helices?

You definitely should at 7A.

Tim



Wed, 04/24/2019 - 10:42 (Reply to #4)



rddey80

Hi Tim,

Hi Tim,

Is it possible to sort particles by ctf-Max-resolution or FOM in cistem?

Thanks,

Raj

Wed, 04/24/2019 - 10:57 [Reply to #5](#)



timgrant

Hi Raj,

Hi Raj,

You cannot directly sort particles this way, you can sort / select images into a group. Then use that group to select only particles from those images.

Tim







rddey80

Could you please check if I

Could you please check if I send you the mrc file to the email:  
[tim@tgrant.co.uk](mailto:tim@tgrant.co.uk) (or any other e-mail address) ?

Thanks,

Raj

Wed, 04/24/2019 - 10:57 [Reply to #7](#)



timgrant

Hi Raj,

Hi Raj,

If you have to send it to me, that probably means you don't see helices?  
I take it there is no known structure of any part?

Tim



Wed, 04/24/2019 - 11:51 [\(Reply to #8\)](#)



rddey80

Hi Tim,

Hi Tim,

I can see some helical features, but not very clear. This is 182Kd protein monomer. Only about 360 residue (out of 1800 residue long protein) close to N-terminal is known by x-ray. I have clear 2d class-averages with about 150k particles. I really need some help from expert people like you to improve the map, so I can build the model. Don't know what to do at this point. If you are interested, I can communicate with your personal e-mail sending some files to have a look.

Thanks for your time,

Raj

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**Source URL:**<https://cistem.org/creating-mask-map>