

Magn. Reson. Discuss., editor comment EC1
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Comment on mr-2021-2

Gottfried Otting (Editor)

Editor comment on "The long-standing relationship between paramagnetic NMR and iron-sulfur proteins: the mitoNEET example. An old method for new stories or the other way around?" by Francesca Camponeschi et al., Magn. Reson. Discuss., <https://doi.org/10.5194/mr-2021-2-EC1>, 2021

Dear Professor Banci,

Thank you for the careful response to the comments made by reviewer 2. Some of the detailed comments made by reviewer 1, however, have not been addressed. Any revised version will have to do this.

I am somewhat bewildered by the long list of references for FeS proteins compiled in the response to reviewer 1, where the techniques used in your present work have been applied. Given this background, what exactly is the novelty reported in your article apart from the assignments of some difficult-to-assign resonances of a specific paramagnetic protein using established techniques? Also the title of your article is quite ambiguous in this regard.

The website of Magn. Reson. specifically states "Routine applications of established techniques and minor technical advances are considered to be outside its scope."

To discuss the NMR aspects from a methodological point of view could be valuable, but there is relatively little of this in the present version of the manuscript beyond a description of the parameters used to set up various experiments. Have the parameters simply been copied from previously published work or have they been adapted specifically to the protein of this work? The discussion and conclusion sections of your manuscript do not discuss the paramagnetic NMR techniques at all. In fact, these sections seem to indicate that observing signals of different linewidths in the 1D ¹H NMR experiments was sufficient to draw the conclusions there are. This is not in line with the gist of the letter accompanying the submission and, if the salient information really only comes from the straightforward 1D ¹H NMR spectra, the assignments made would be inconsequential and, I am afraid, Magn. Reson. not the right forum for this work. I encourage submission of a revised version only if these concerns can be substantially addressed.

Minor queries:

Line 301: what exactly is reported in red in Table 2?

When referring to distances from the FeS cluster, it is not clear whether the distances refer to the nearest metal ion or the centre of the cluster(s).

Best regards,

Gottfried