Response to Reviewers;

**Reviewer B;**

I would like to thank you for your valuable suggestions and corrections. You can find the explanations for your suggested corrections as a list in the following order.

1. The 13C NMR data of the ligand has been added in supplementary material file and given in detail in revised manuscript as you suggested.
2. The experimental parts of fluorescence and viscosity studies have been rewritten according to your suggestions.
3. The result for effect of EB on DNA viscosity is consistent with our previous experiments. The discussion about effect of copper complex on DNA viscosity has been rewrotten.
4. In lane 8 and 9, complex cuts DNA in small pieces so that small DNA pieces cannot be visualized at agarose gel.
5. t-BuOH had no impact on cleavage activity of complex (lane 6) while DMSO had a slight impact. This result suggests that peroxide radicals are major radical oxygen species in cleavage mechanism of present copper complex.
6. DNA cleavage part has been improved according to suggestions.
7. This limitation is prevented by short irradiation time.
8. Suggested corrections have been hold in viscosity study part and reference list.
9. A.A has been used for the denomination of ascorbic acid.
10. Detected grammar errors have been fixed.

**Reviewer D;**

I would like to thank you for your valuable suggestions and corrections. You can find the explanations for your suggested corrections as a list in the following order.

1. Complex solutions have been prepared by dissolving in minimum amount of DMSO and diluted to required concentration with KCl-Tris buffer. Time dependent UV spectra of complex without DNA addition have been recorded and no significant change has been observed after 12 hours. Therefore, displacement of ligand with DMSO is not considered.
2. DMSO can act as hydroxyl radical scavenger (page 4 in DNA cleavage experimental part).
3. Tested complex binds to DNA non-covalently, thus isosbestic point is not expected in figure 2.
4. New references those concern hydrogen bond effect on DNA binding have been added in text. In fact it is not an evidence but support the explanation. (Page 7)
5. New references have been added in UV-titration and viscosity results and discussed in detail.
6. Required corrections have been hold in page 4 and 5.
7. Cited. (page 6)
8. Traces have been identified (please see corrected figure 3 and 4).
9. Edited.(page 6 and 8)
10. Edited. (page 6)
11. Edited. (figure 1)
12. References list has been re-arranged.
13. Main text has been edited.