

## Supplementary Information

### Antimicrobial and anticancer properties of Carbon Monoxide Releasing Molecules of the *fac*-[Re(CO)<sub>3</sub>(N-N)L]<sup>+</sup> family

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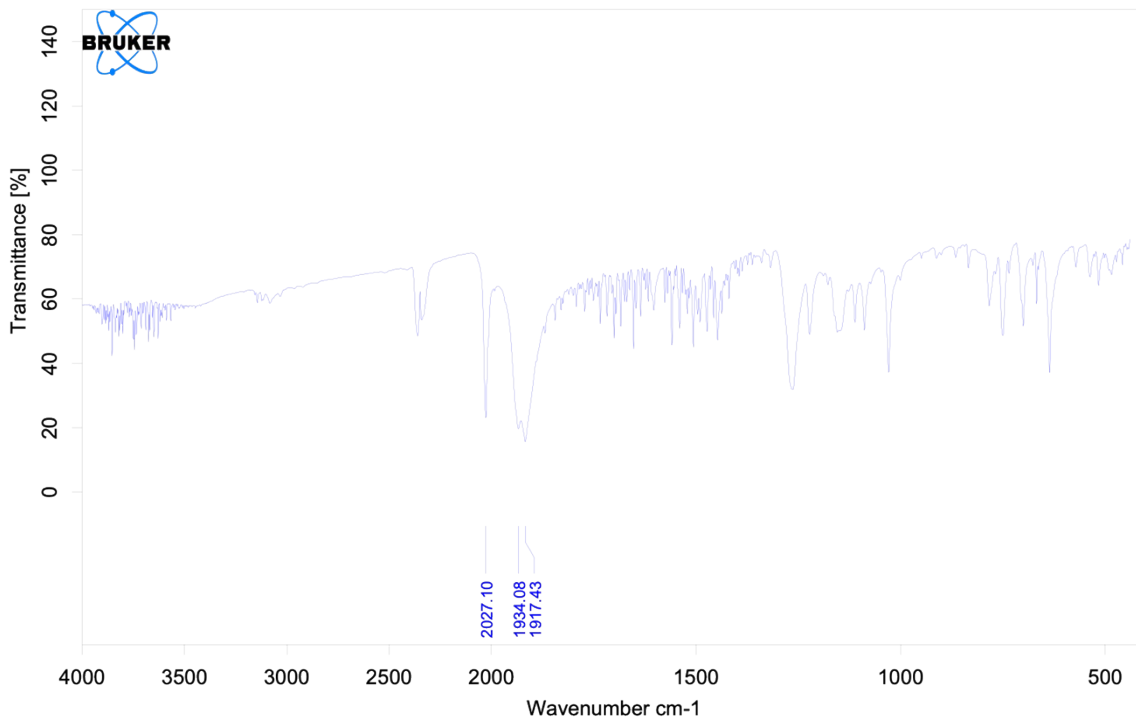
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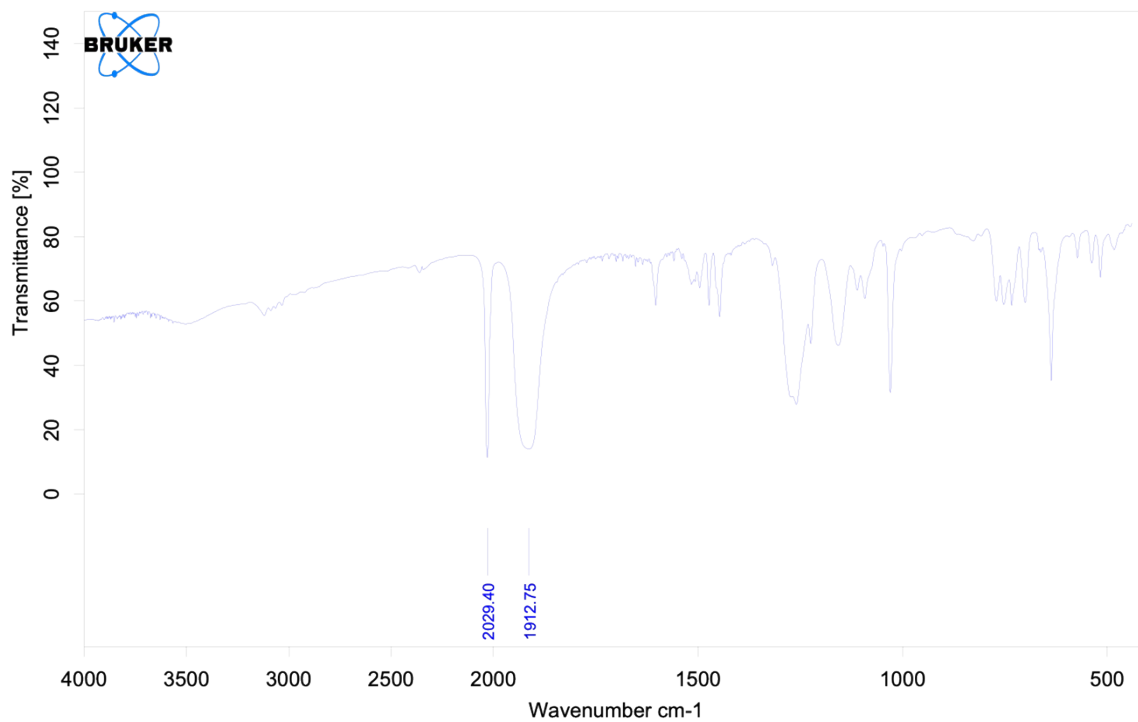
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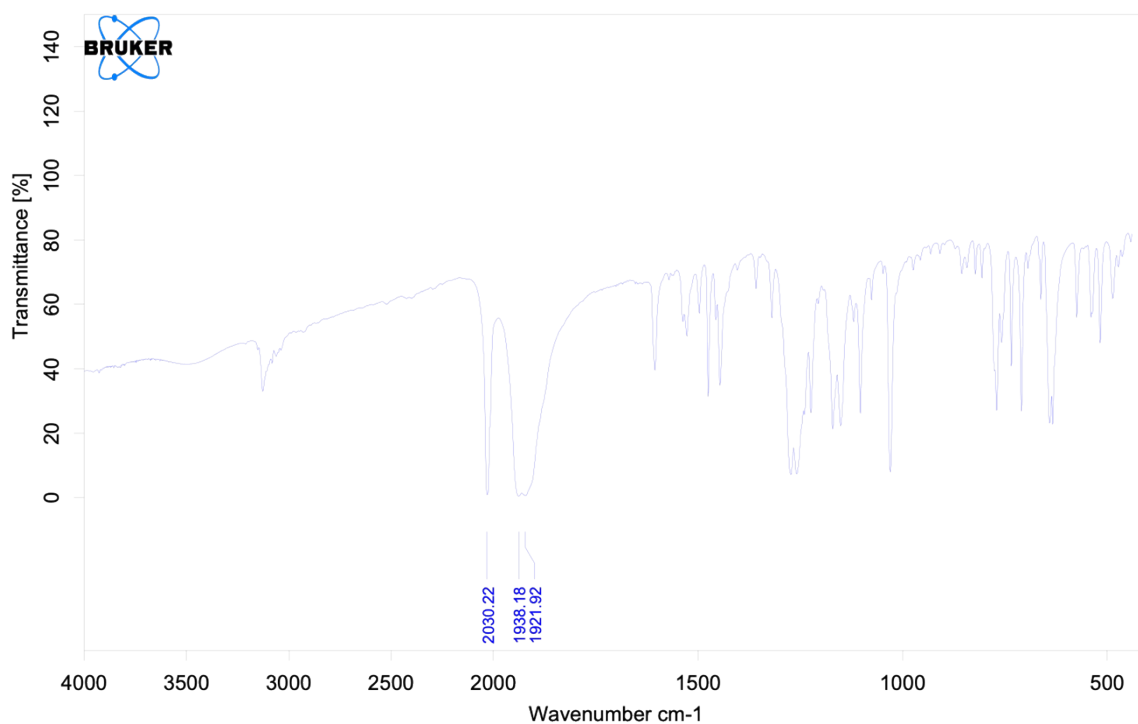
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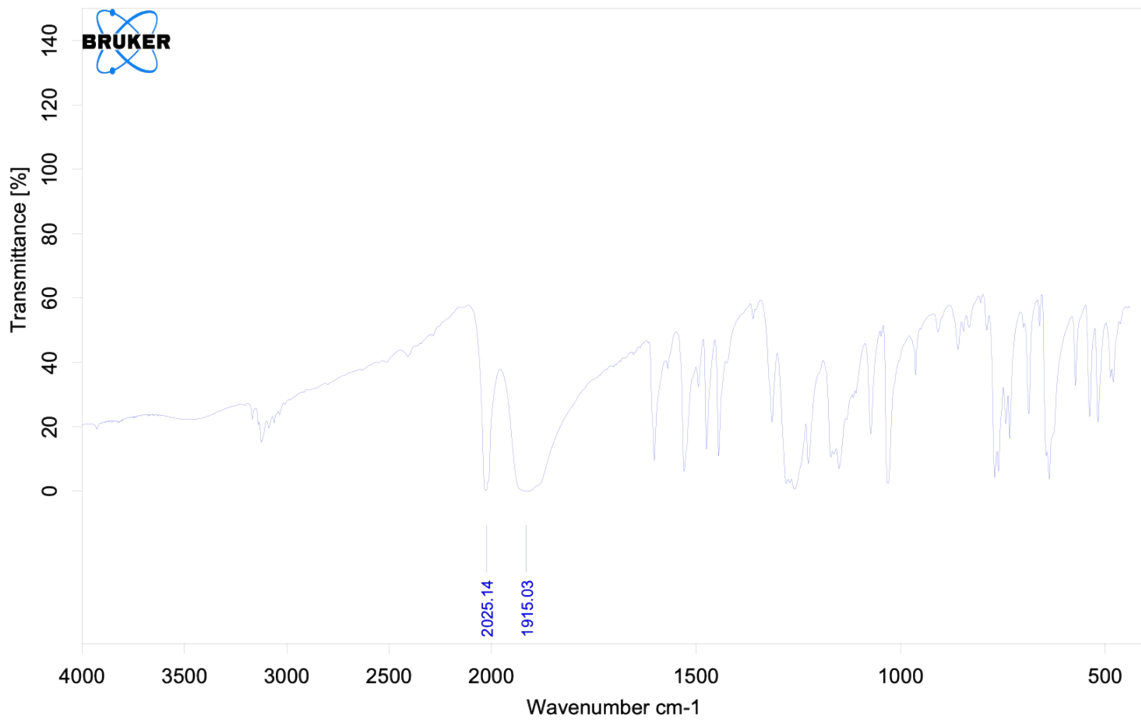
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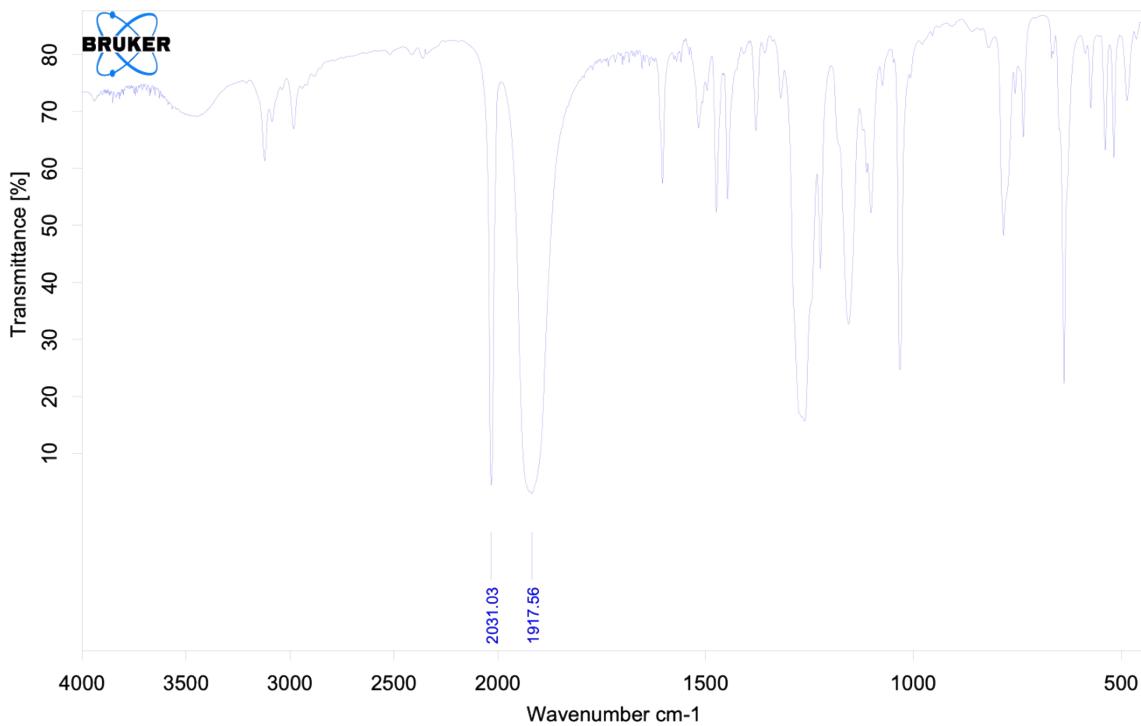
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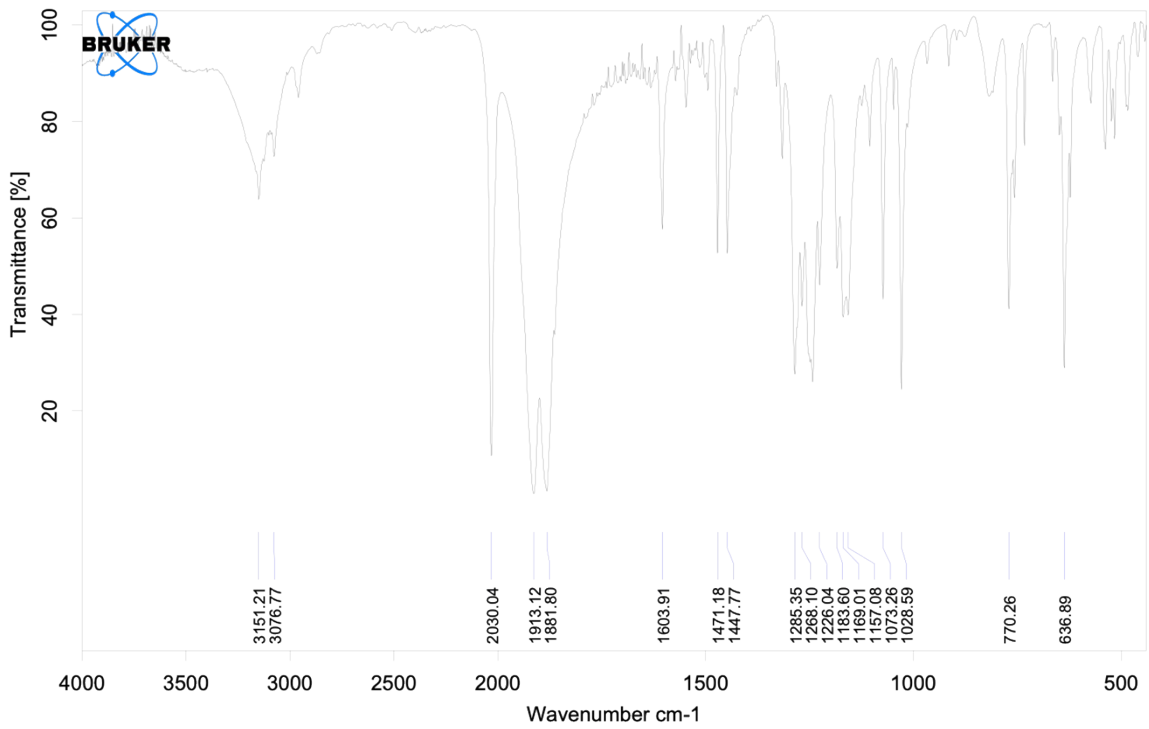
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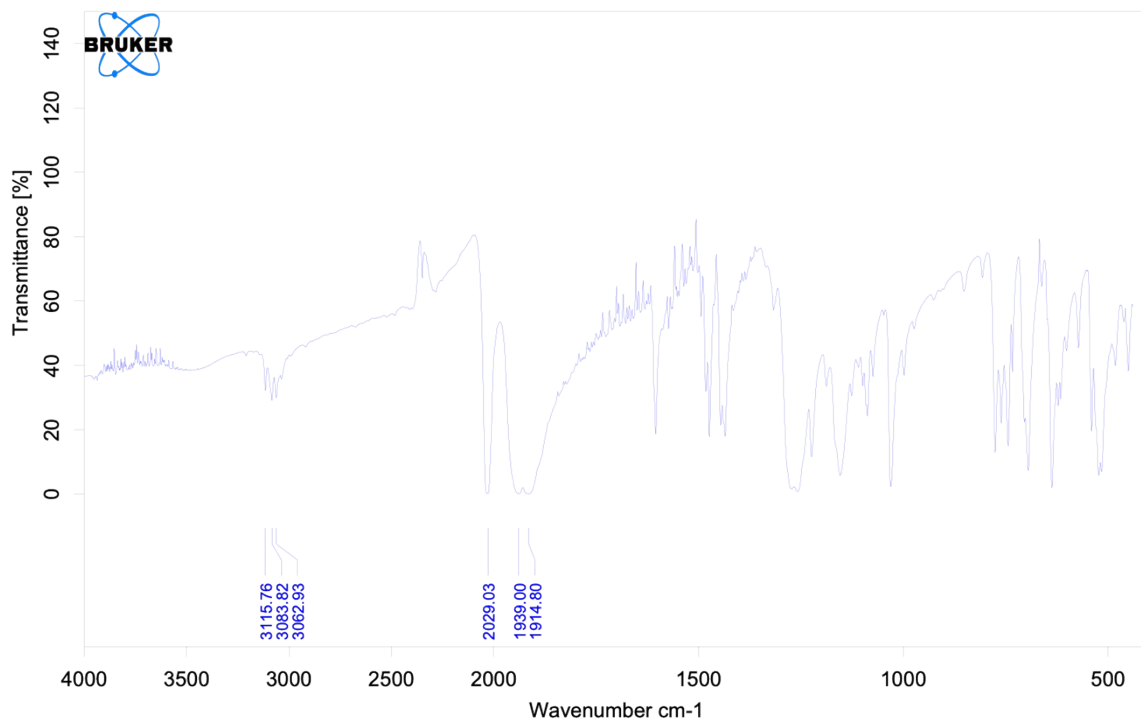
FTIR *fac*-[Re(CO)<sub>3</sub>(bpy)(1-tert-butylimidazole)][OTf] (KBr pellet)



FTIR *fac*-[Re(CO)<sub>3</sub>(bpy)(imidazole)]OTf (KBr pellet)

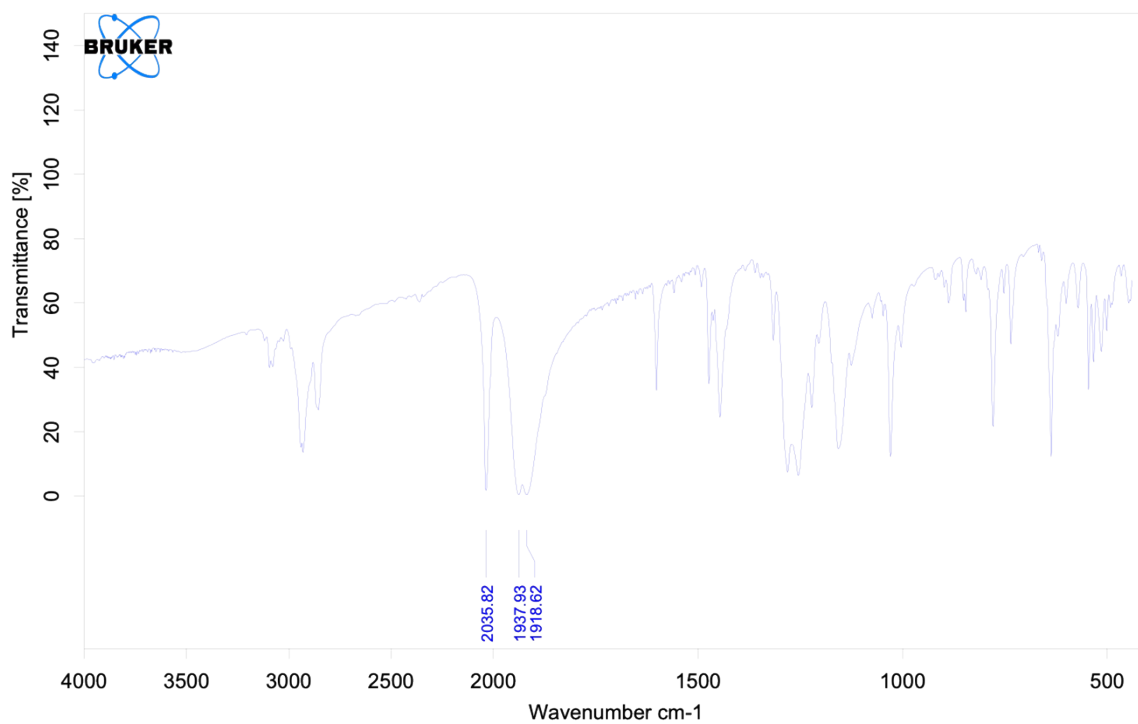


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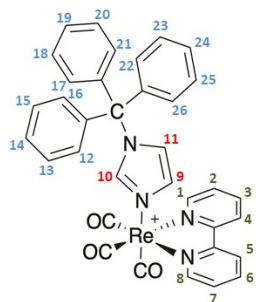




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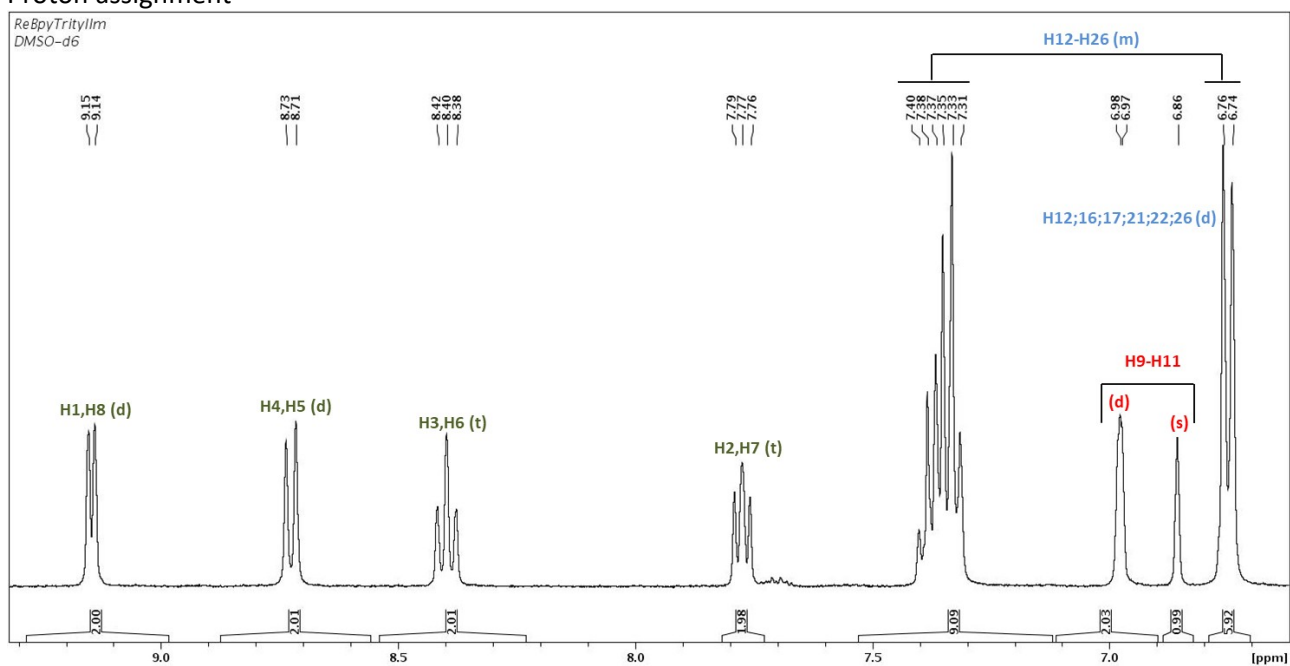


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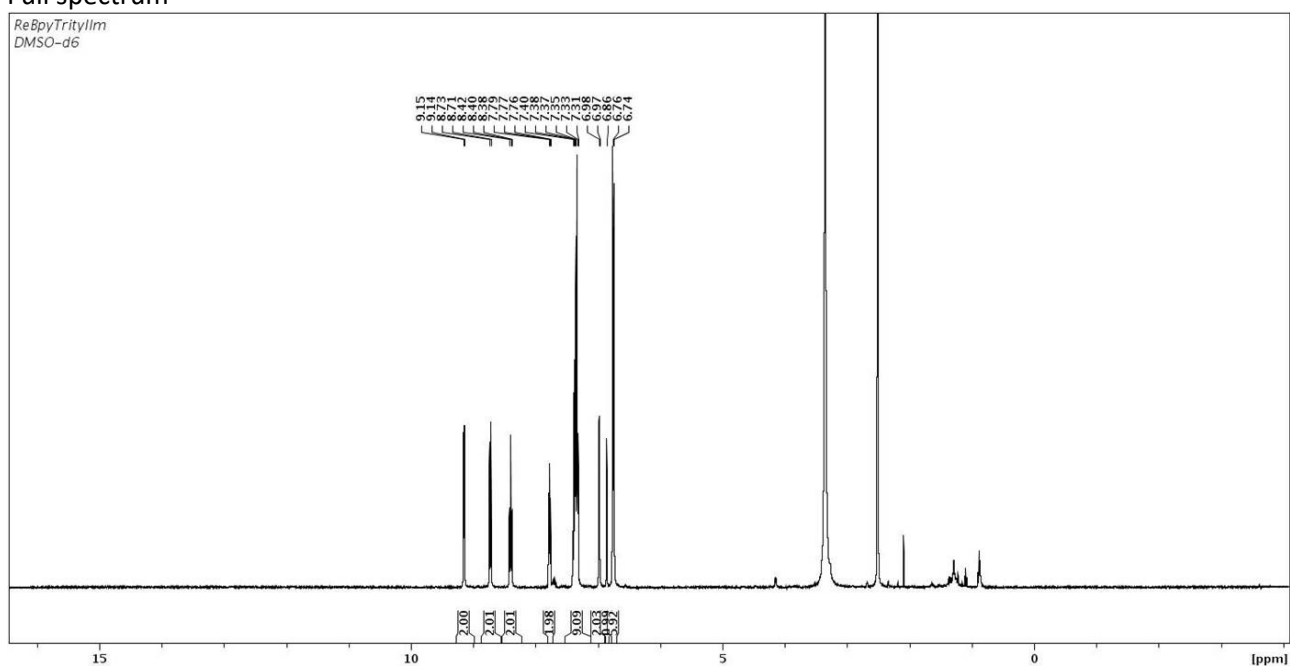


ReBpyTritylIm

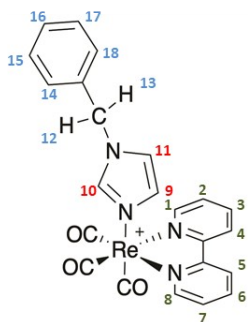
Proton assignment



Full spectrum

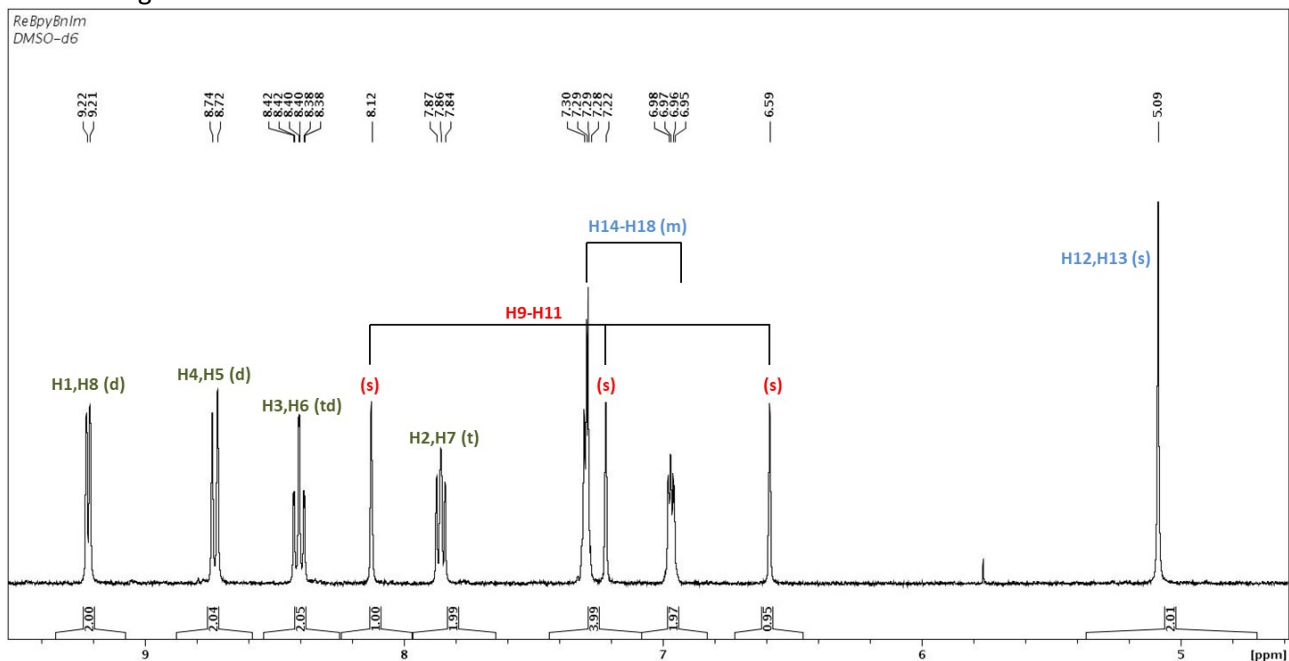


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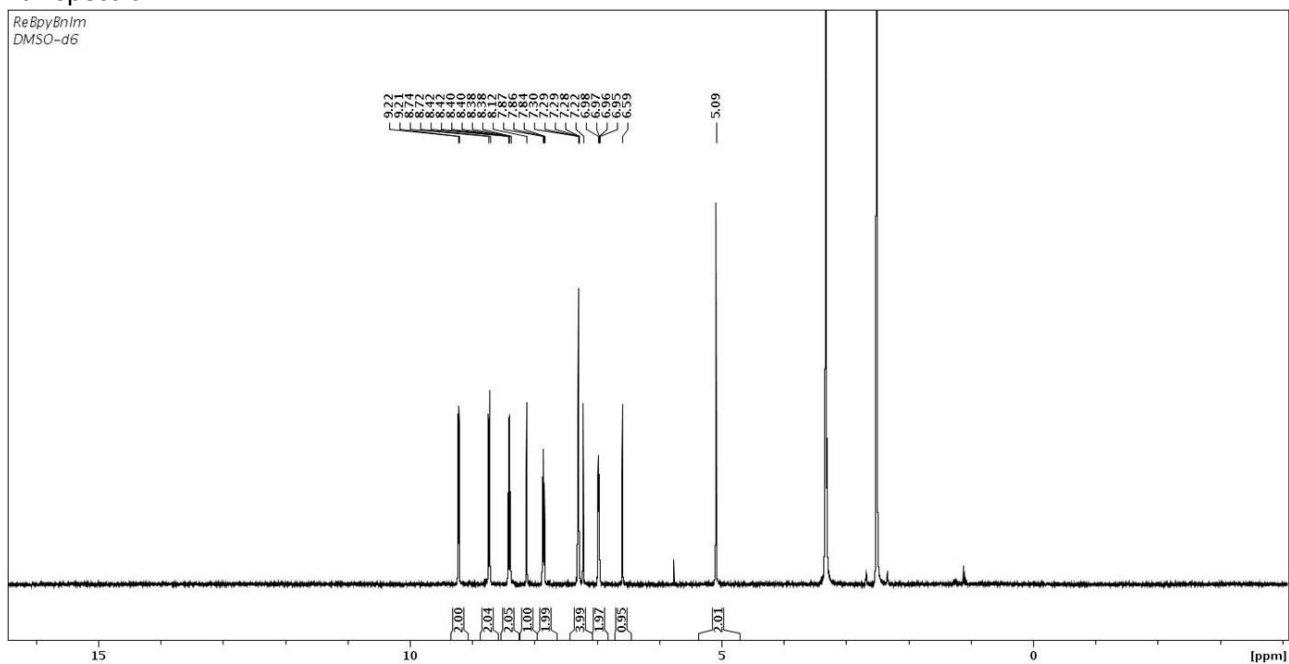


ReBpyBnlm

Proton assignment

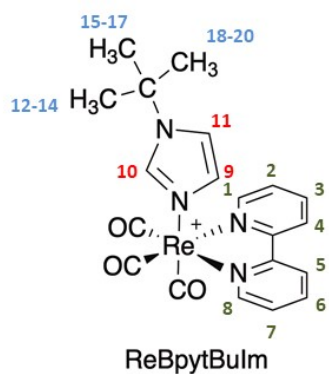


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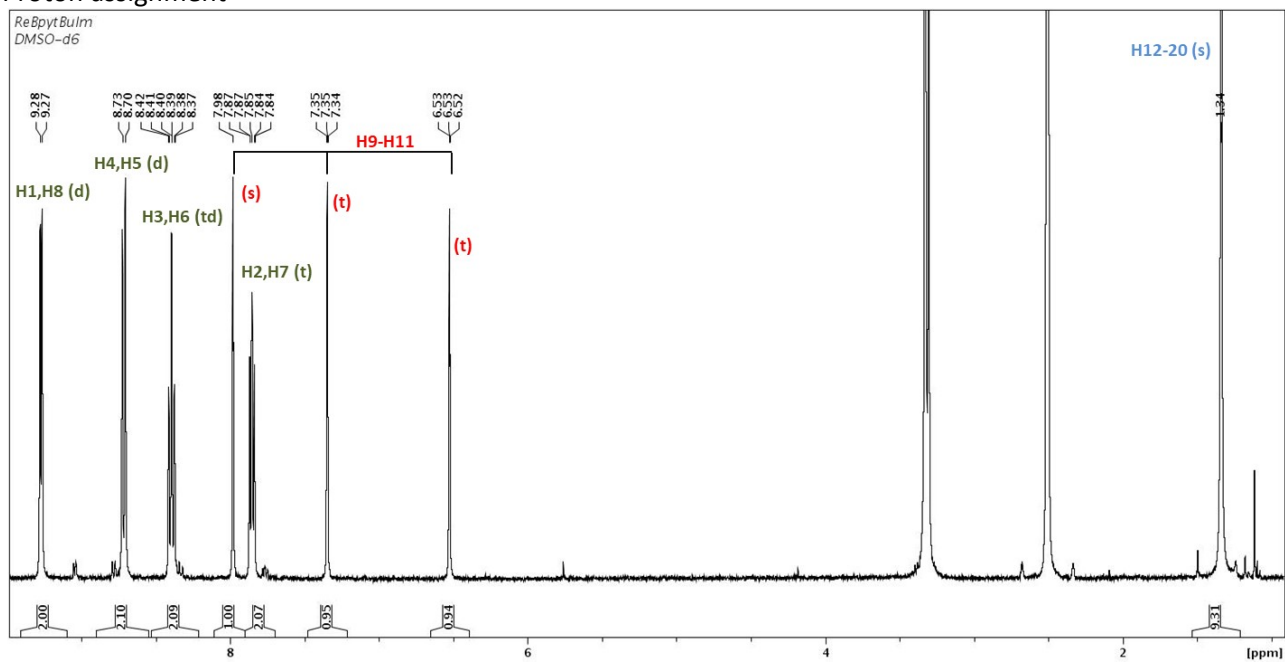




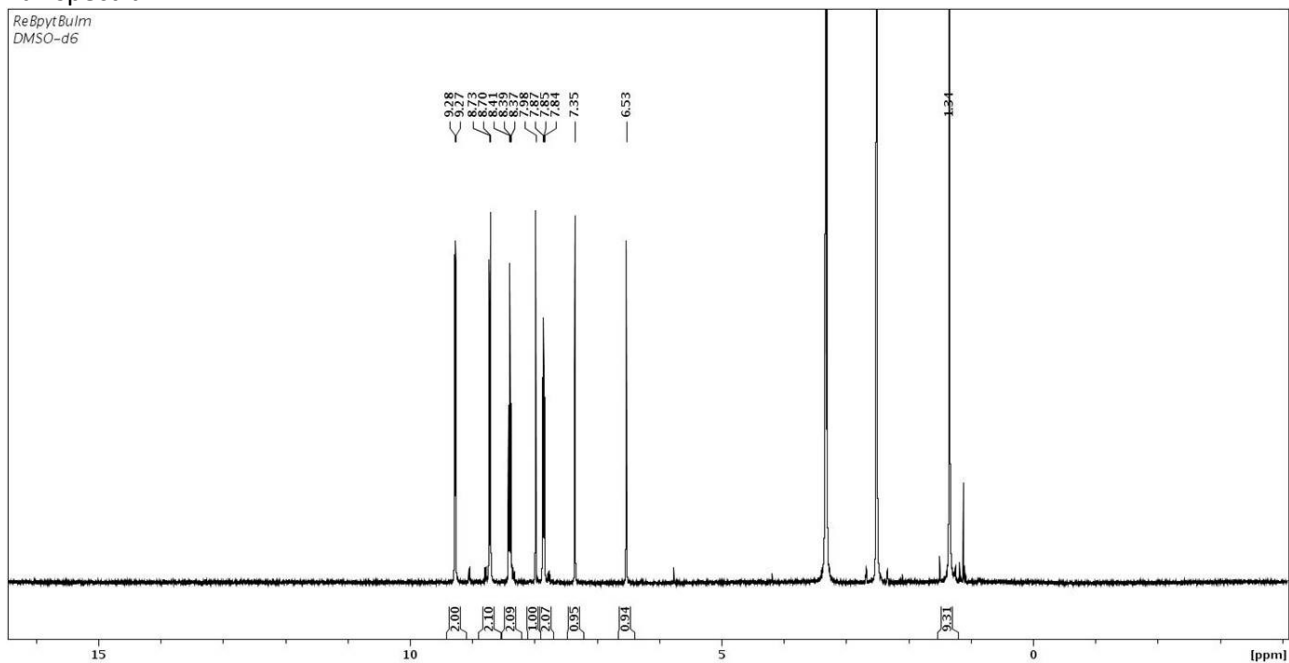
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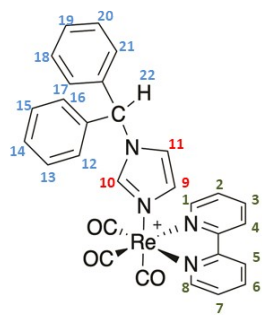
Proton assignment



Full spectrum

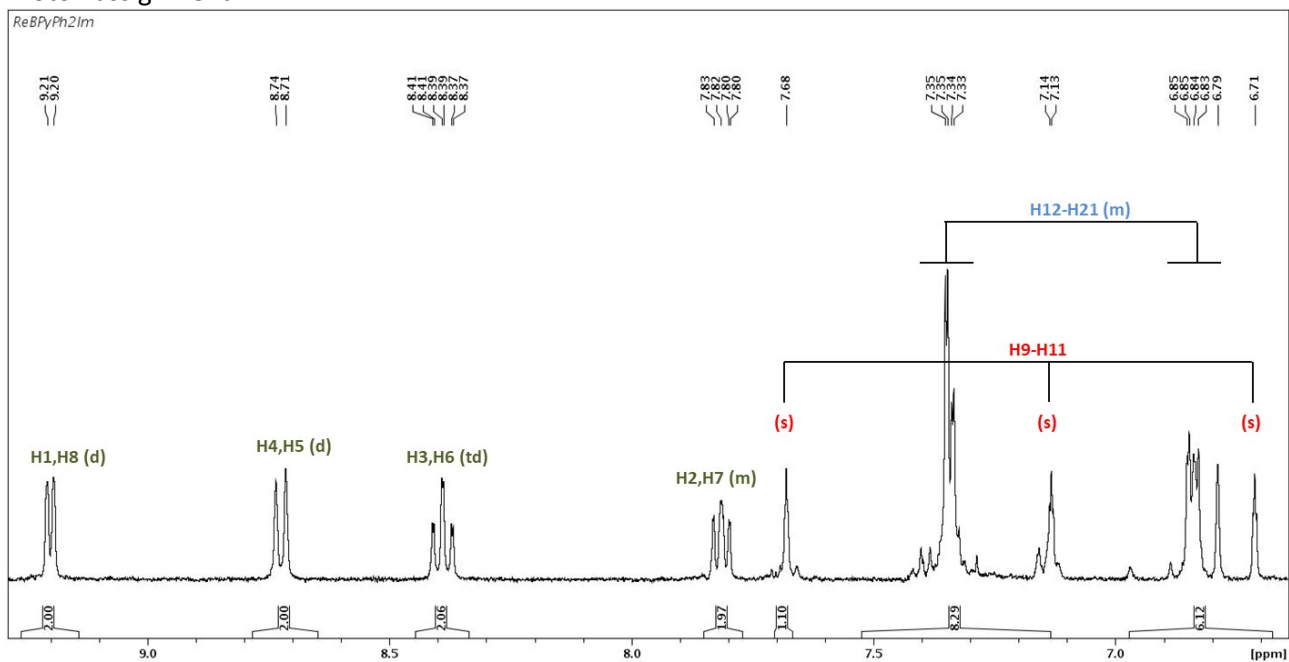


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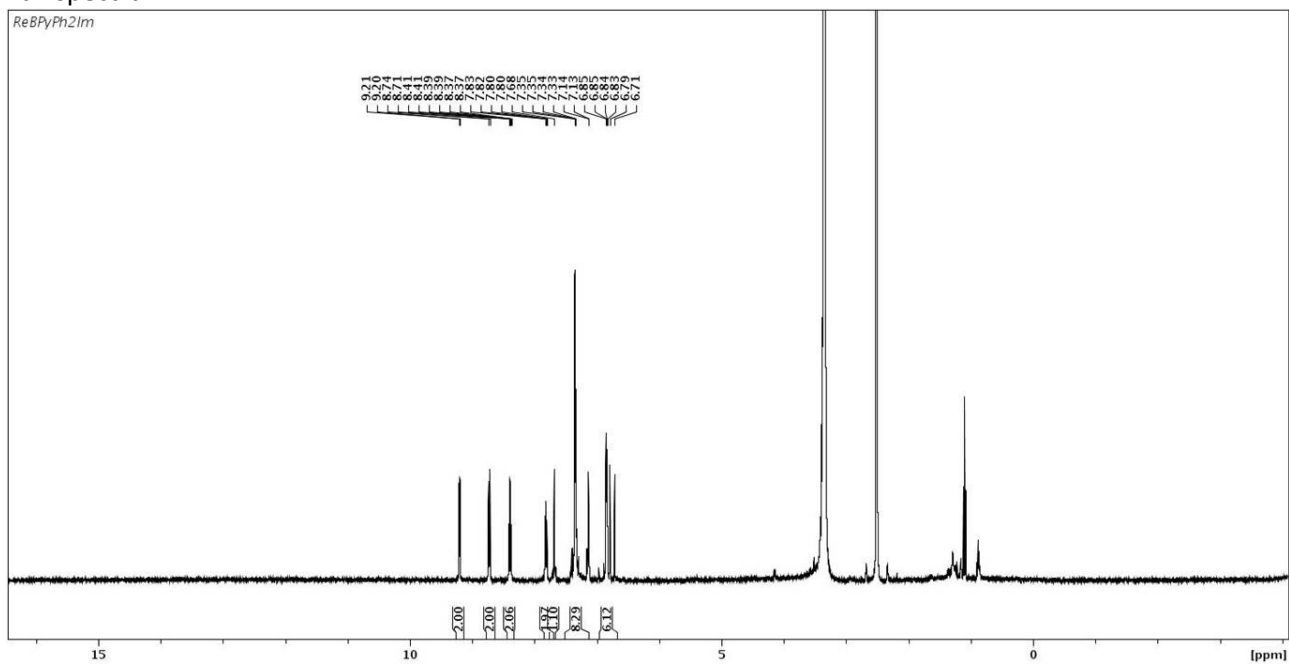


ReBpyPh<sub>2</sub>Im

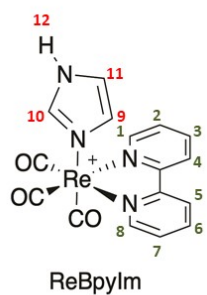
Proton assignment



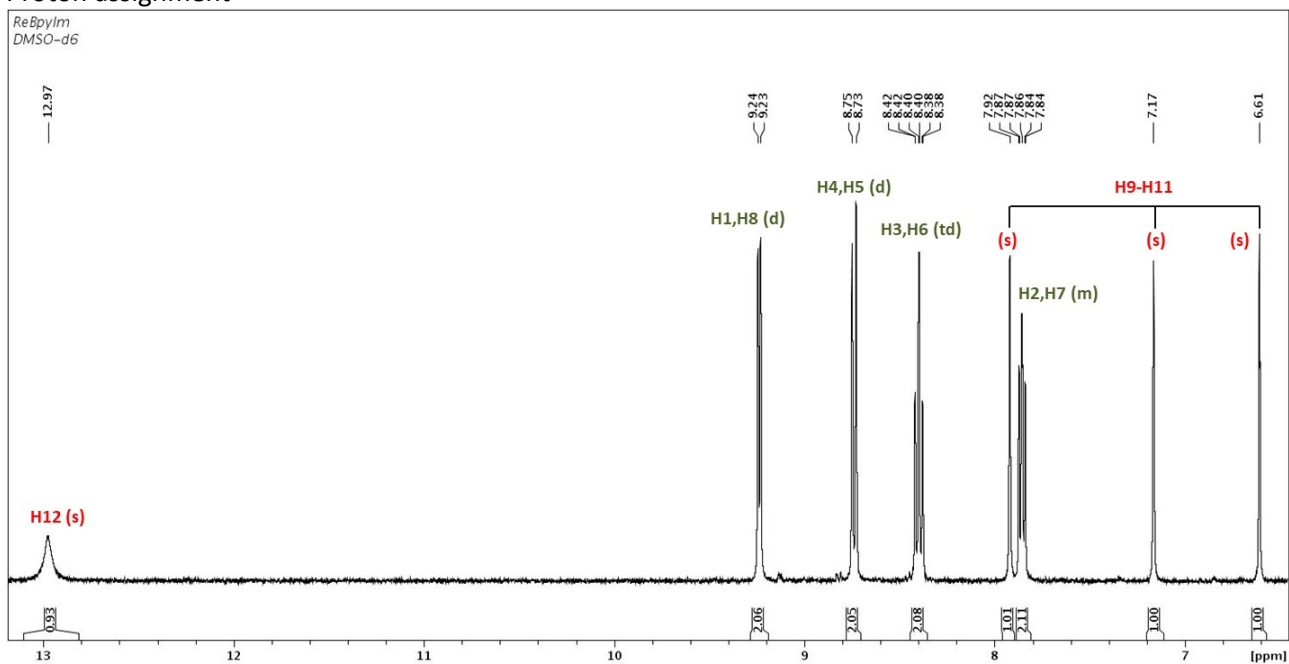
Full spectrum



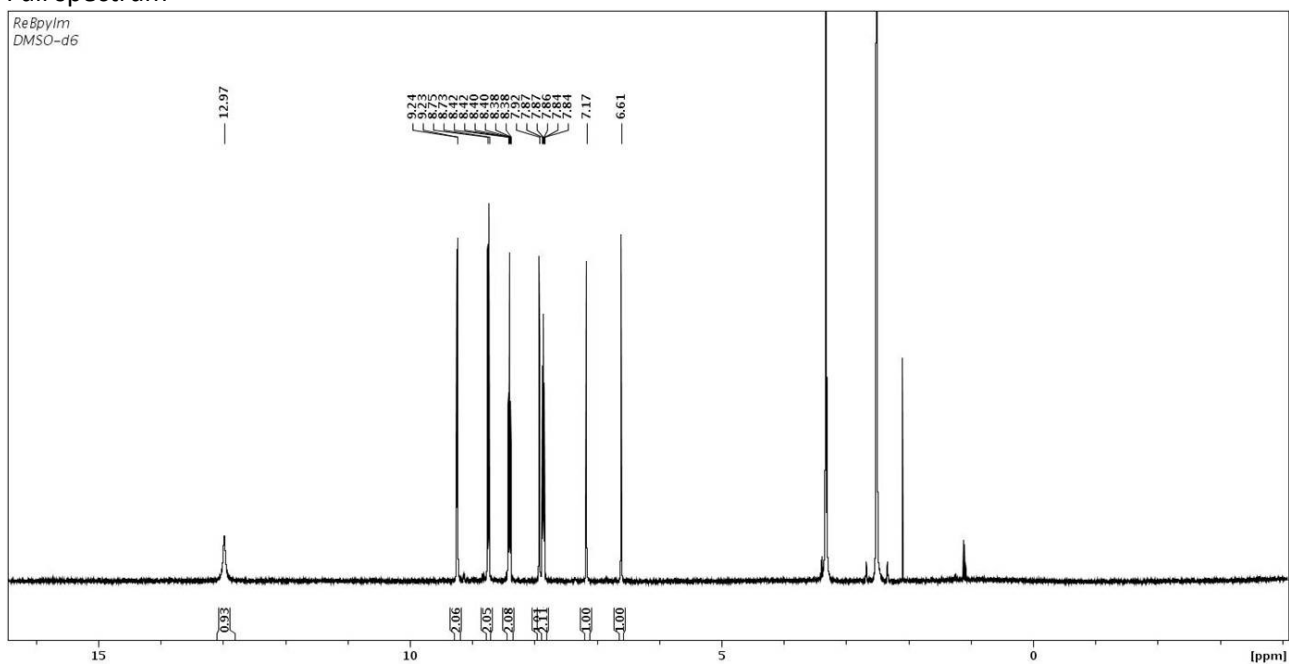
$^1\text{H-NMR}$  *fac*-[Re(CO)<sub>3</sub>(bpy)(imidazole)]OTf



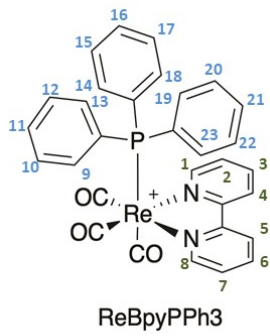
Proton assignment



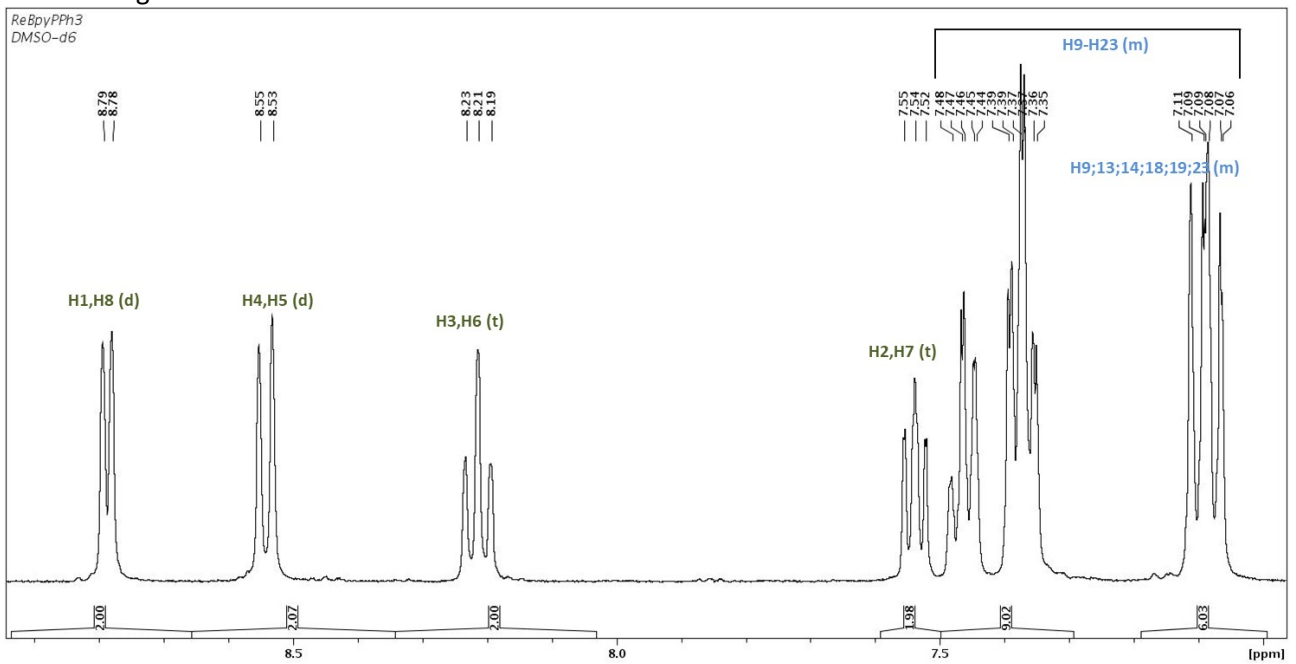
Full spectrum



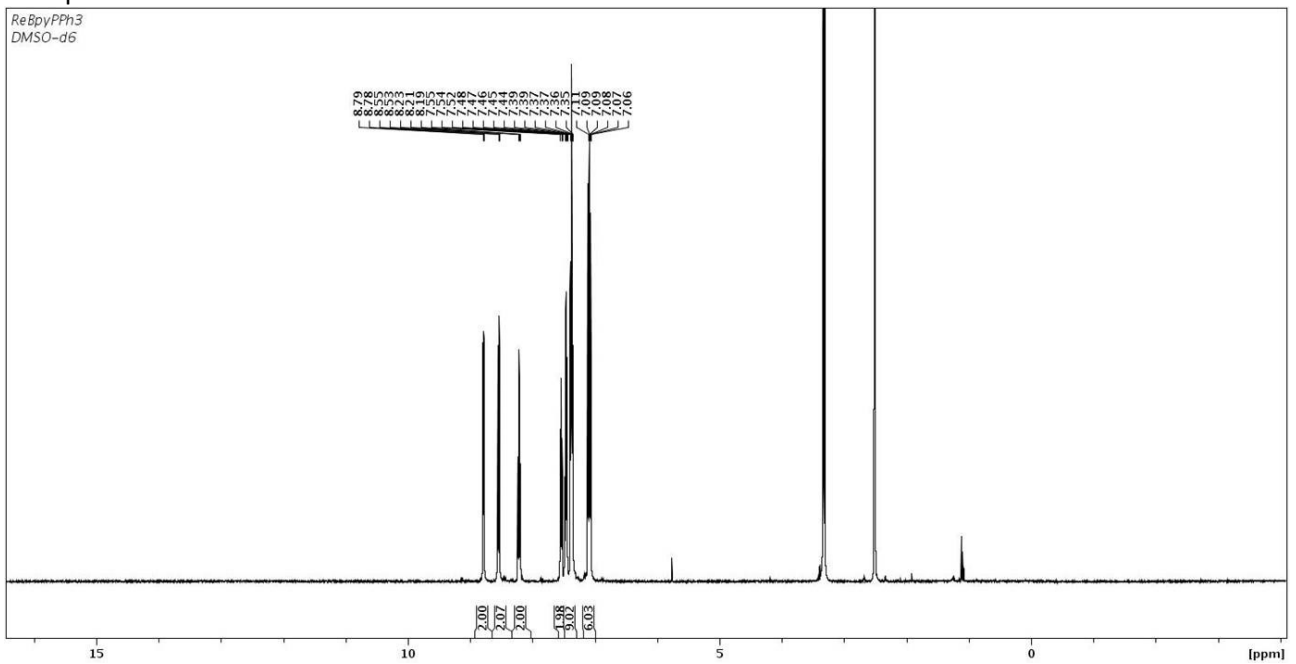
$^1\text{H-NMR}$  *fac*-[Re(CO)<sub>3</sub>(bpy)PPh<sub>3</sub>]OTf



Proton assignment

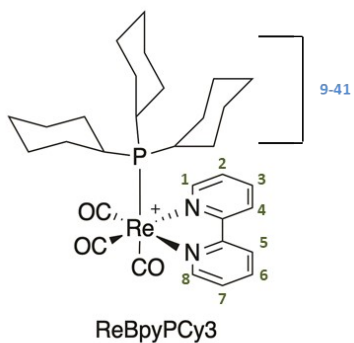


Full spectrum

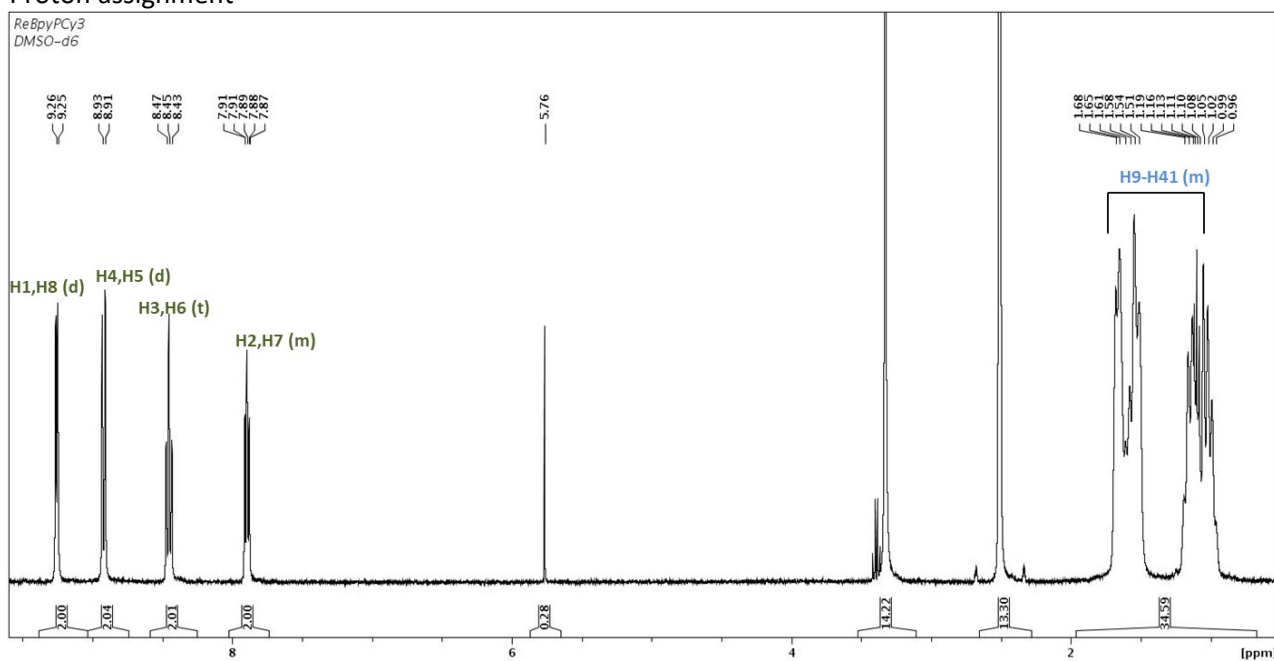




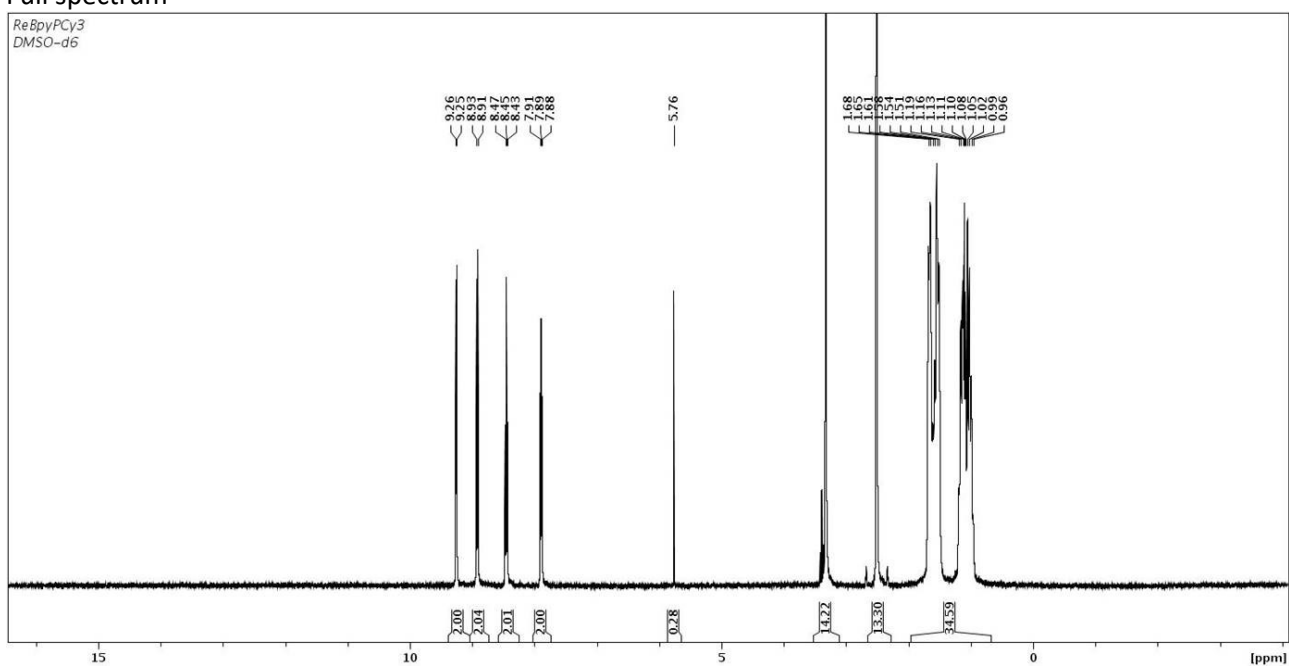
$^1\text{H-NMR}$  *fac*-[Re(CO)<sub>3</sub>(bpy)PCy<sub>3</sub>]OTf

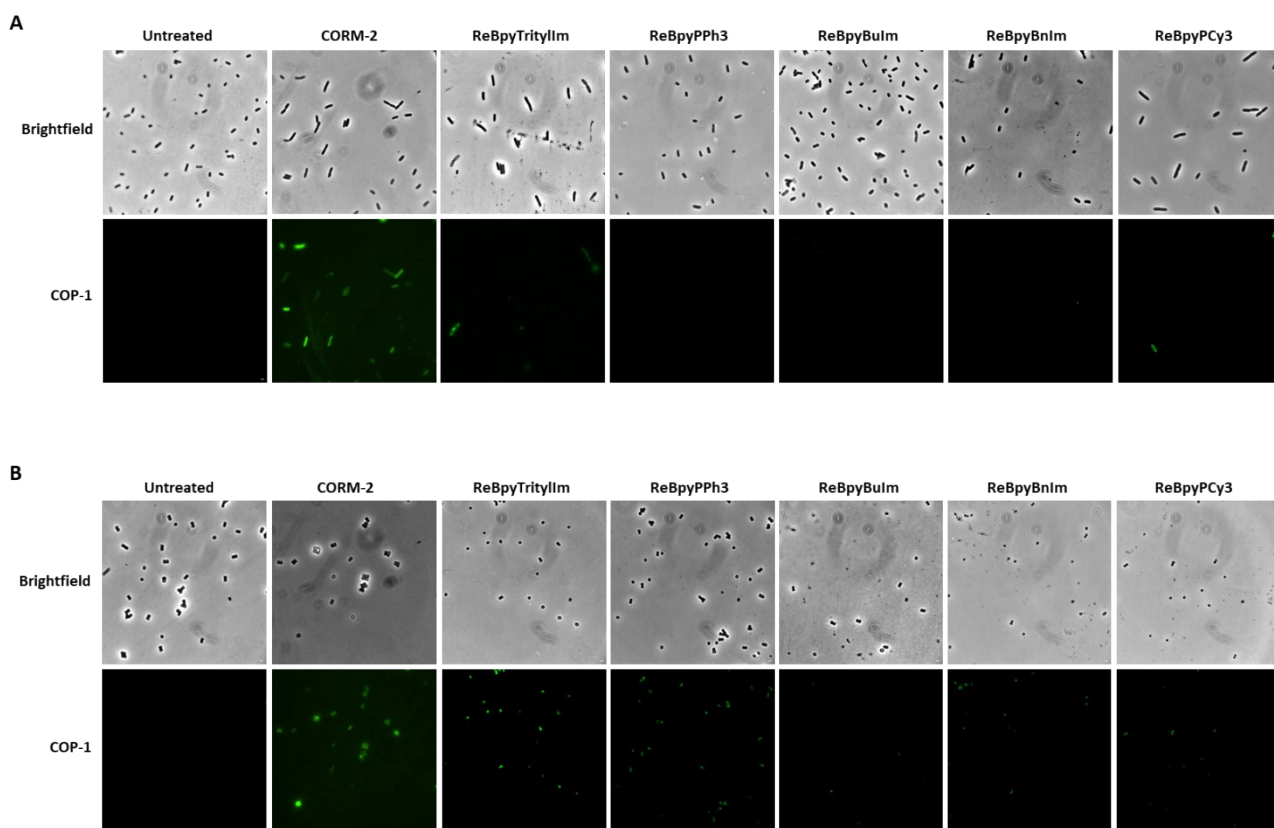


Proton assignment



Full spectrum





**Figure S1** - Fluorescence microscopy images of *E. coli* (A) and *S. aureus* (B) treated with COP-1. Bacterial cells were left untreated or treated for 15 min with CORMs and exposed to 1  $\mu$ M COP-1. *E. coli* was incubated with the indicated compounds all at 64  $\mu$ g/ml. (B) *S. aureus* was incubated with ReBpyTrityllm, ReBpyPPh3 and ReBpyPCy3 at a concentration of 4  $\mu$ g/ml, and with CORM-2, ReBpyBulm and ReBpyBnlm at 64  $\mu$ g/ml.

Fluorescence images that were acquired with a FITC filter are shown in bottom panels and the correspondent bright-field images are depicted in the upper panels (100x objective).