



Figure 1S. This figure provides the dispersion, 100 KHz field-modulated, rapid-passage Q-band (34.1 GHz) EPR spectra from Fe(III)•BLM and ABLM. These spectra were obtained under the temperature and field modulation conditions of the present ENDOR measurements. The conditions were: temperature 2.0 K, 100 KHz field modulation ~2.2 G, and microwave power ~0.25 μ W (microwatts). In this adiabatic rapid passage condition, the electron spin relaxation is slow in comparison to the 10 μ s period of the 100 KHz field modulation.