

Materials List for:

# Rapid Scan Electron Paramagnetic Resonance Opens New Avenues for Imaging Physiologically Important Parameters *In Vivo*

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## Materials

Name	Company	Catalog Number	Comments
4-oxo-2,2,6,6-tetra( <sup>2</sup> H <sub>3</sub> )methyl-1-(3,3,5,5- <sup>2</sup> H <sub>4</sub> ,1- <sup>15</sup> N)piperdinyloxyl ( <sup>15</sup> N-PDT)	CDN Isotopes	M-2327	98% atom <sup>15</sup> N, 98 % atom D, Quebec Canada
4- <sup>1</sup> H-3-carbamoyl-2,2,5,5-tetra( <sup>2</sup> H <sub>3</sub> )methyl-3-pyrrolinyloxyl ( <sup>15</sup> N-mHCTPO)	N/A	N/A	Synthesized at U. Maryland and described in Reference 29
3-carboxy-2,2,5,5-tetra( <sup>2</sup> H <sub>3</sub> )methyl-1-(3,4,4- <sup>2</sup> H <sub>3</sub> ,1- <sup>15</sup> N)pyrrolidinyloxyl ( <sup>15</sup> N-Proxyl)	N/A	N/A	Synthesized at U. Maryland and described in Reference 25
4 mm Quartz EPR Tubes	Wilmad Glass	707-SQ-100M	
4-oxo-2,2,6,6-tetra( <sup>2</sup> H <sub>3</sub> )methyl-1-(3,3,5,5- <sup>2</sup> H <sub>4</sub> )piperdinyloxyl ( <sup>14</sup> N-PDT)	CDN Isotopes	D-2328	98% atom D, Quebec Canada
pH sensitive trityl radical (αTAM <sub>4</sub> )	Ohio State University	N/A	Synthesized at Ohio State University and described in Reference 26
Potassium Phosphate, Monobasic	J.T. Baker Chemicals	1-3246	
6 mm Quartz EPR Tubes	Wilmad Glass	Q-5M-6M-0-250/RB	
8 mm Quartz EPR Tubes	Wilmad Glass	Q-7M-8M-0-250/RB	
5-tert-butoxycarbonyl-5-methyl-1-pyrroline- <i>N</i> -oxide (BMPO)	N/A	N/A	Synthesized at U. Maryland and described in Reference 30
Hydrogen Peroxide	Sigma Aldrich	H1009 SIGMA	30%
16 mm Quartz EPR tube	Wilmad Glass	16-7PP-11QTZ	
Medium Pressure 450 W UV lamp	Hanovia	679-A36	Fairfield, NJ
L-Glutathione, reduced	Sigma Aldrich	G470-5	
Nitronyl	NA	N/A	Synthesized at U. Maryland and described in Reference 31
Sodium Hydroxide	J.T. Baker Chemicals	1-3146	