

Supplemental information

Imaging of hydroxyl radical generation using dynamic nuclear polarization magnetic resonance imaging and spin-trapping agent

Shinichi Shoda^a, Fuminori Hyodo^{b,c,*}, Yoko Tachibana^{c,d}, Mamoru Kiniwa^c, Tatsuya Naganuma^e, Hinako Eto^{c,d}, Norikazu Koyasu^a, Masaharu Murata^{c,d}, Masayuki Matsuo^a

a Department of Radiology, School of Medicine, Gifu University. 1-1 Yanagido, Gifu 501-1194, Japan

b Department of Radiology, Frontier Science for Imaging, School of Medicine, Gifu University, Gifu, Japan

c Innovation Center for Medical Redox Navigation, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka, 812-8582, Japan.

d Center for Advanced Medical Innovation, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka 812-8582, Japan

e Japan Redox Inc. Fukuoka, 4-29 Chiyo, Fukuoka 812-0044, Japan

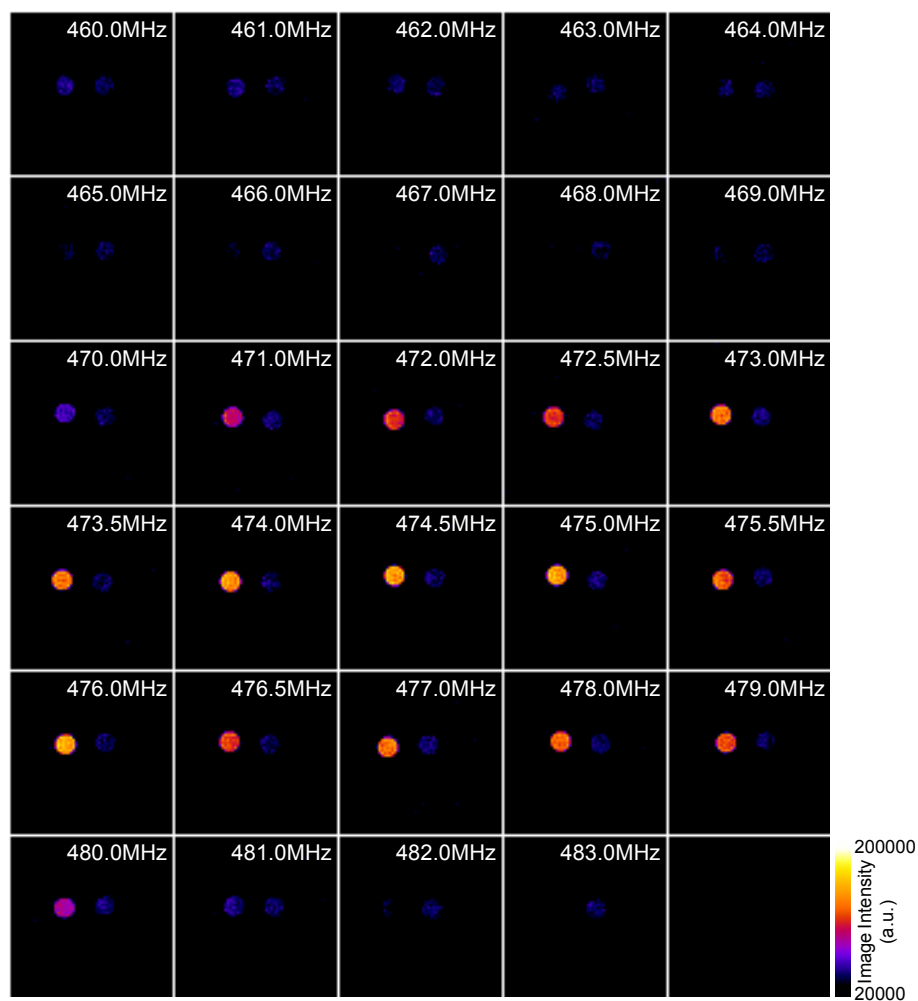
*Correspondence should be addressed to: Fuminori Hyodo

Department of Radiology, Frontier Science for Imaging, School of Medicine, Gifu University, Gifu, Japan, 1-1 Yanagido, Gifu 501-1194, Japan

Tel.: +81-58-230-6437, Fax: +81-58-230-6440

E-mail: hyodof@gifu-u.ac.jp

Supplemental Figure 1 (Figure S1)



To determine the appropriate EPR resonance frequency of the DMPO-OH free radical for obtaining the DNP effect. DNP-MRI was performed at various EPR frequencies from 460 MHz to 483MHz. DNP enhancements were observed between 470MHz and 480MHz.