

13C

Hyperpolarized [1,4-¹³C₂]fumarate as an imaging agent of tumor cell death *in vivo*

Hyperpolarized [1-¹³C]dehydroascorbic acid

Hyperpolarized [¹³C]-2-hydroxyethylpropionate

Hyperpolarized ¹³C-labeled bicarbonate (H¹³CO₃⁻) for *in vivo* pH measurement with ¹³C magnetic resonance spectroscopy

Hyperpolarized sodium 1-[¹³C]pyruvate

Hyperpolarized α-keto[1-¹³C]isocaproate as a ¹³C magnetic resonance spectroscopic agent for profiling branched chain amino acid metabolism in tumors