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# Magnetic Resonance Spectroscopic Imaging

National Cancer Institute

## Source

National Cancer Institute. *Magnetic Resonance Spectroscopic Imaging*. NCI Thesaurus. Code C29934.

Magnetic resonance spectroscopy is a noninvasive imaging technique that acts as a complement to conventional imaging of brain tumors in order to improve the sensitivity and specificity of the diagnostic process. This technique operates by exciting and recording signals from a range of magnetic resonance frequencies, allowing the identification and quantification of several biologically significant molecules containing proton groups that resonate in the appropriate frequency range. The technique facilitates observation of the spatial distribution of metabolic patterns over a region of interest and surrounding tissue at a high spatial resolution.