

Resource Summary Report

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LCModel

RRID:SCR_014455

Type: Tool

Proper Citation

LCModel (RRID:SCR_014455)

Resource Information

URL: <http://s-provencher.com/pages/lcmodel.shtml>

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Description: Software for automatic quantification of in vivo proton MR spectra. Though it is mainly used for brain analysis, it can be used for a variety of analyses in different areas of the body. It receives time-domain data as input and gives a one page summary output. It is fully automatic, non-interactive, and operator-independent., THIS RESOURCE IS NO LONGER IN SERVICE. Documented on September 16,2025.

Resource Type: data analysis software, data processing software, software application, software resource

Defining Citation: [DOI:10.1002/mrm.1910300604](https://doi.org/10.1002/mrm.1910300604)

Keywords: automatic, quantification, in vivo, proton mr spectra, data analysis software

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: LCModel

Resource ID: SCR_014455

Record Creation Time: 20220129T080320+0000

Record Last Update: 20260829T182456+0000

Ratings and Alerts

No rating or validation information has been found for LCModel.

No alerts have been found for LCModel.

Data and Source Information

Usage and Citation Metrics

We found 504 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Lee M, et al. (2026) Prenatal (1-3)IGF-1 Treatment Is Ineffective and Behaviorally Detrimental in a Rat Model of Cortical Malformation. *Brain and behavior*, 16(4), e71405.

Jayadev NB, et al. (2025) Accelerated Navigator for Rapid B_0 Field Mapping for Real-Time Shimming and Motion Correction of Human Brain MRI. *NMR in biomedicine*, 38(10), e70126.

Xiao Y, et al. (2025) A graphical pipeline platform for MRS data processing and analysis: MRSpecLAB. *Frontiers in neuroimaging*, 4, 1610658.

Dehkordi O, et al. (2025) ^1H MRS-based metabolite changes at ventral respiratory control centers of the medulla oblongata following administration of morphine in wild-type and GIRK2 mutant mice. *Current research in physiology*, 8, 100147.

Smith AN, et al. (2025) Creatine monohydrate pilot in Alzheimer's: Feasibility, brain creatine, and cognition. *Alzheimer's & dementia (New York, N. Y.)*, 11(2), e70101.

Zhao S, et al. (2025) Neuroplasticity After Hypoxic-Ischemic Brain Injury in Neonatal Pigs Based on Time-Dependent Behavior of ^1H -MRS-Tau Protein and Synaptic Associated Proteins and Synaptic Structure Analysis. *Neurochemical research*, 50(3), 169.

Eftekhari Z, et al. (2025) Reliability and Reproducibility of Metabolite Quantification Using ^1H MRS in the Human Brain at 3 T and 7 T. *NMR in biomedicine*, 38(8), e70087.

Shen Y, et al. (2025) CEST imaging combined with ^1H -MRS reveal the neuroprotective effects of riluzole by improving neurotransmitter imbalances in Alzheimer's disease mice. *Alzheimer's research & therapy*, 17(1), 20.

Park H, et al. (2025) Anterior insular cortex glutamate-glutamine (Glx) levels predict general psychopathology via heightened error sensitivity. *Frontiers in neuroscience*, 19, 1592015.

Chan KL, et al. (2025) TE optimization for J-difference editing of 2-hydroxyglutarate at 3T. *Magnetic resonance in medicine*, 94(4), 1363.

Gao Y, et al. (2025) Catecholaminergic Modulation of Metacognition Is Reflected in Aperiodic EEG Activity and Predicted by Baseline GABA⁺ and Glx Concentrations. *Human brain mapping*, 46(4), e70173.

Liu Z, et al. (2025) Associations Between Brain Metabolites Measured With MR Spectroscopy and Head Impacts in High School American Football Athletes. *Journal of magnetic resonance imaging : JMIR*, 61(4), 1738.

Miura M, et al. (2025) Safety and efficacy of belt-type electrical stimulation for preventing disuse syndrome in elderly hemodialysis patients: a pilot study. *Frontiers in rehabilitation sciences*, 6, 1559077.

Duguid A, et al. (2025) Comparison of Low-Rank Denoising Methods for Dynamic Deuterium MRSI at 7 T. *NMR in biomedicine*, 38(10), e70125.

Choi G, et al. (2025) Evaluation of Glutathione T2 in the Human Brain Using J-Difference MRS at 3 T: Multicenter Multivendor Study. *NMR in biomedicine*, 38(2), e5313.

Wang YR, et al. (2025) Anterior Cingulate Cortex Glutamate Levels and Sensory Integration Are Associated in Individuals With Social Anhedonia: A Comparison Between 3T and 7T MRS. *PsyCh journal*, 14(4), 560.

Tully J, et al. (2024) Impaired striatal glutamate/GABA regulation in violent offenders with antisocial personality disorder and psychopathy. *Molecular psychiatry*, 29(6), 1824.

Pajuelo D, et al. (2024) Metabolic changes assessed by ¹H MR spectroscopy in the corpus callosum of post-COVID patients. *Magma (New York, N.Y.)*, 37(5), 937.

Risikesan J, et al. (2024) Similar insulin regulation of splanchnic FFA and VLDL-TG in men with nonalcoholic hepatic steatosis and steatohepatitis. *Journal of lipid research*, 65(7), 100580.

Wiseman RL, et al. (2024) Brain N -acetyl-aspartyl-glutamate is associated with cognitive function in older virally suppressed people with HIV. *AIDS (London, England)*, 38(7), 1003.