Resource Summary Report

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TARQUIN

RRID:SCR_002598
Type: Tool

Proper Citation

TARQUIN (RRID:SCR_002598)

Resource Information

URL: http://tarquin.sourceforge.net/

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Description: An analysis tool for automatically determining the quantities of molecules present in NMR spectroscopic data. The intended purpose of TARQUIN is to aid the characterisation of pathologies, in particular brain tumours, both non-invasively with in-vivo 1H MRS and ex-vivo with 1H HR-MAS. TARQUIN has the following features: * Free to use and modify under the GPL licence. * Based on a flexible time-domain fitting routine designed to give accurate rapid and automated quantitation for routine analysis. * Cross platform, works on Windows, Linux and OSX. * Comes packaged with a quantum mechanically based metabolite simulator to allow basis set construction optimised for the investigation of particular pathologies sequence parameters. * Includes both GUI and command line interface for one-off and batch analyses.

Abbreviations: TARQUIN

Synonyms: TARQUIN MRS analysis package

Resource Type: software application, software resource

Defining Citation: PMID:20878762

Keywords: magnetic resonance, mrs, mas, molecule, nmr spectroscopy

Funding:

Availability: GNU General Public License

Resource Name: TARQUIN

Resource ID: SCR_002598

Alternate IDs: nlx_156002

Alternate URLs: http://www.nitrc.org/projects/tarquin

Record Creation Time: 20220129T080214+0000

Record Last Update: 20250508T064801+0000

Ratings and Alerts

No rating or validation information has been found for TARQUIN.

No alerts have been found for TARQUIN.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 50 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Revie L, et al. (2024) Age-related fornix decline predicts conservative response strategy-based slowing in perceptual decision-making. Aging brain, 5, 100106.

Gordji-Nejad A, et al. (2024) Single dose creatine improves cognitive performance and induces changes in cerebral high energy phosphates during sleep deprivation. Scientific reports, 14(1), 4937.

Tzanetakos D, et al. (2023) Early metabolic alterations in the normal?appearing grey and white matter of patients with clinically isolated syndrome suggestive of multiple sclerosis: A proton MR spectroscopic study. Experimental and therapeutic medicine, 26(1), 349.

Harvey-Jones K, et al. (2023) Early assessment of injury with optical markers in a piglet model of neonatal encephalopathy. Pediatric research, 94(5), 1675.

Christidi F, et al. (2023) Hippocampal Metabolic Alterations in Amyotrophic Lateral Sclerosis: A Magnetic Resonance Spectroscopy Study. Life (Basel, Switzerland), 13(2).

Yu M, et al. (2023) Changes in aspartate metabolism in the medial-prefrontal cortex of

nicotine addicts based on J-edited magnetic resonance spectroscopy. Human brain mapping, 44(18), 6429.

Wang X, et al. (2023) Reduced GABA concentration in patients with white matter hyperintensities. Frontiers in neuroscience, 17, 1320247.

Rustamzadeh A, et al. (2023) Neurochemical Ameliorating of the Hippocampus in Dyslipidemic Alzheimer Patients Following Silymarin; a Double-Blind Placebo-Controlled Randomized Clinical Trial. Medical journal of the Islamic Republic of Iran, 37, 123.

Candiota AP, et al. (2022) Establishing Imaging Biomarkers of Host Immune System Efficacy during Glioblastoma Therapy Response: Challenges, Obstacles and Future Perspectives. Metabolites, 12(3).

Völzke Y, et al. (2021) On the reproducibility of hippocampal MEGA-sLASER GABA MRS at 7T using an optimized analysis pipeline. Magma (New York, N.Y.), 34(3), 427.

Pang R, et al. (2021) Melatonin and/or erythropoietin combined with hypothermia in a piglet model of perinatal asphyxia. Brain communications, 3(1), fcaa211.

Robertson NJ, et al. (2021) Human umbilical cord mesenchymal stromal cells as an adjunct therapy with therapeutic hypothermia in a piglet model of perinatal asphyxia. Cytotherapy, 23(6), 521.

Wang Z, et al. (2021) Female mice lacking ER? display excitatory/inhibitory synaptic imbalance to drive the pathogenesis of temporal lobe epilepsy. Theranostics, 11(12), 6074.

Patkee PA, et al. (2021) Neurometabolite mapping highlights elevated myo-inositol profiles within the developing brain in down syndrome. Neurobiology of disease, 153, 105316.

Piersson AD, et al. (2021) Multiparametric MRI for the improved diagnostic accuracy of Alzheimer's disease and mild cognitive impairment: Research protocol of a case-control study design. PloS one, 16(9), e0252883.

Jelen LA, et al. (2021) Imaging Brain Glx Dynamics in Response to Pressure Pain Stimulation: A 1H-fMRS Study. Frontiers in psychiatry, 12, 681419.

Szewczyk A, et al. (2021) Effect of Lacosamide and Ethosuximide Chronic Treatment on Neural Precursor Cells and Cognitive Functions after Pilocarpine Induced Status Epilepticus in Mice. Brain sciences, 11(8).

Bogner W, et al. (2021) Accelerated MR spectroscopic imaging-a review of current and emerging techniques. NMR in biomedicine, 34(5), e4314.

Ostojic SM, et al. (2020) Short-term GAA loading: Responders versus nonresponders analysis. Food science & nutrition, 8(8), 4446.

Nguemeni C, et al. (2020) A Single Session of Anodal Cerebellar Transcranial Direct Current Stimulation Does Not Induce Facilitation of Locomotor Consolidation in Patients With Multiple Sclerosis. Frontiers in human neuroscience, 14, 588671.