Resource Summary Report

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JAX Neuroscience Mutagenesis Facility Protocols

RRID:SCR_003021

Type: Tool

Proper Citation

JAX Neuroscience Mutagenesis Facility Protocols (RRID:SCR_003021)

Resource Information

URL: http://nmf.jax.org/protocols.html

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Description: THIS RESOURCE IS NO LONGER IN SERVICE, documented on July 17, 2013. The Neuroscience Mutagenesis Facility of the Jackson Laboratory (NMF) was established to produce new neurological mouse models that could serve as experimental models for the exploration of basic neurobiological mechanisms and diseases. The protocols are available. The impetus for the program resulted from the recognition that * the value of genomic data would remain limited unless more information about the functionality of its individual components became available, and * the task of linking genes to specific behavior would best be accomplished by employing a combination of different approaches. In an effort to complement already existing programs, the Neuroscience Mutagenesis Facility decided to use: a random, genome-wide approach to mutagenesis, i.e. N-ethyl-N-nitrosourea (ENU) as the mutagen; a three-generation back-cross breeding scheme to focus on the detection of recessive mutations; behavioral screens selective for the detection of phenotypes deemed useful for the program goals. Protocols: * Genetics ** Production of Mice for a Genome-Wide ENU Mutagenesis Screen ** Production of Mice using Chemical Mutagenesis of Mouse ES Cells * Protocols ** Step by step procedures-- Mouse mutagenesis with ENU ** Step by step procedures-- ES Cell mutagenesis with EMS * Phenotyping: Overview * Protocols:(currently only screens marked * are in use) ** Acoustic startle response (ASR) ** Auditory brainstem response (ABR) ** CLAMSTM(former CCMS) ** Creatine kinase ** Developmental Screen * ** Eye and Vision * ** Gait Analysis ** Gustation ** Observation * ** Seizure threshold * ** Additional Background Information

Abbreviations: NMF Protocols

Synonyms: JAX Protocols, Protocols of the NMF, Protocols of the Neuroscience Mutagenesis Facility, JAX NMF Protocols

Resource Type: narrative resource, experimental protocol, data or information resource

Keywords: mutant mouse strain, genetically-modified mouse, motor system function, impairment of function, eye disease, eye disorder, ophthalmological disorder, ophthalmic disorder, ocular disease, disease of eye, epilepsy, epileptic seizure, seizure disorder, gustatory system function, taste system function, bioinformatics, acoustic startle response, auditory brainstem response, creatine kinase, development, eye, vision, gait, gustation, observation, seizure, mutagenesis, n-ethyl-n-nitrosourea, es cell mutagenesis, ems, genetics, phenotyping

Funding:

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: JAX Neuroscience Mutagenesis Facility Protocols

Resource ID: SCR 003021

Alternate IDs: nif-0000-00527

Record Creation Time: 20220129T080216+0000

Record Last Update: 20250428T053022+0000

Ratings and Alerts

No rating or validation information has been found for JAX Neuroscience Mutagenesis Facility Protocols.

No alerts have been found for JAX Neuroscience Mutagenesis Facility Protocols.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.