



About the Coriell Institute for Medical Research

The Coriell Institute for Medical Research is an independent, not-for-profit research organization dedicated to understanding human genetic diseases and providing the highest quality genetic resources.

Some facts about the Institute include the following:

- ◆ Conducts research on stem cells, genetic variation, and cancer
- ◆ Distributes cell lines and DNA samples worldwide

Additional information about Coriell is available at www.coriell.org.

Cover image: Human myoblast cell line GM16620 stained for vimentin (Red) and DNA (DAPI).

How to Order

Samples are available to all qualified investigators.

For instructions and forms visit <http://ccr.coriell.org/nigms/comm/order/order.html> or call 800-752-3805 (USA only) or 856-757-4848.

How to Submit

We accept blood or biopsies (for fibroblasts or differentiated cells) and established cell lines. For all submissions, clinical and laboratory data and a copy of the consent with which the samples were collected are needed. For each line submitted and accepted into the catalog, the submitter may receive a free cell line or DNA sample.

Please contact us at the address below before submitting.

NIGMS Human Genetic Cell Repository
Tel 800-752-3805 (USA only)
Tel 856-757-4848
Fax 856-757-9737
NIGMS@coriell.org



Coriell Institute for Medical Research
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NIGMS Human Genetic Cell Repository at Coriell Institute for Medical Research

www.coriell.org/ccr/nigms

A Repository of cell lines and DNA from individuals with inherited diseases, chromosomal abnormalities, somatic cell hybrids, apparently healthy controls, and populations representing human variation

About the NIGMS Human Genetic Cell Repository

- ◆ Established in 1972 by the National Institute of General Medical Sciences (NIGMS) at the Coriell Institute for Medical Research
- ◆ Distributes high quality, uncontaminated and clinically well-documented cell lines and DNA
- ◆ Includes samples from more than 500 genetic diseases
- ◆ Contains more than 9,500 cell lines
- ◆ Provides DNA from more than 4,000 cell lines
- ◆ Has different cell types including lymphoblastoid, fibroblast, and differentiated cells

The Collections

Inherited Disease Collection

This is the largest part of the Human Genetic Cell Repository (HGCR) and includes cell lines from hundreds of disorders including ataxia telangiectasia, xeroderma pigmentosum, fragile X, cystic fibrosis, Fanconi anemia, Niemann-Pick disease, Huntington disease, spinal muscular atrophy, Friedrich ataxia and many additional disorders. Mutations have been determined in more than 800 cell lines. DNA is available from all lines upon request.

Chromosomally Aberrant Lines/Somatic Cell Hybrids

This is a major collection of chromosomally aberrant cell lines and somatic cell hybrids. Each line is karyotyped and many are characterized by FISH or aCGH. The collection includes Angelman, Prader-Willi, and Down syndrome as well as lines with translocations, aneuploidies and deletions.

Human Variation

The HGCR contains large panels of American populations including African-Americans, Caucasians, Han Chinese from Los Angeles, and Mexican-Americans from Los Angeles. In addition, there are many small panels of populations from around the world.

CEPH Collection

More than 800 samples from 62 families from the Centre d'Etude du Polymorphisme Humain (CEPH) are in the HGCR at Coriell. For each family there is a pedigree. These samples are one of the most highly used resources in HGCR.

International HapMap Project

In collaboration with the National Human Genome Research Institute (NHGRI), the NIGMS HGCR has prepared lymphoblastoid cell lines and DNA for the International HapMap Project. The populations include samples from the CEPH collection, Yoruba in Ibadan, Nigeria, Han Chinese in Beijing, China, and Japanese in Tokyo, Japan for Phase I. Additional populations including the Denver (Colorado) Metropolitan Chinese Community, Luhya in Kenya, and the Mexican Communities in Los Angeles are being added for Phase III. See <http://ccr.coriell.org/nigms/products/hapmap.html> for additional information and links.

Polymorphism Discovery Resource

In collaboration with NHGRI and the Centers for Disease Control and Prevention (CDC), the NIGMS HGCR developed a resource of 450 cell lines with associated DNA samples for discovery of polymorphisms. The individuals sampled include European-Americans, African-Americans, Mexican-Americans, Native Americans, and Asian-Americans. The samples in the panels are representative of the US population distribution and are not identified by ethnicity.



Main liquid nitrogen storage facility at Coriell

Extended Families

There is a large series of extended families with inherited disorders including ataxia telangiectasia, cystic fibrosis, Huntington disease, MODY, osteogenesis imperfecta, primary affective disorder, Usher syndrome, and many others.

Apparently Healthy Controls

The Repository has a set of samples from apparently healthy individuals which can be selected according to age, gender, ethnicity, and cell type.

Repository Submissions

The HGCR is actively seeking additions to the collection.

Inherited disorders

Samples with well-documented clinical information, mutation analysis (when the gene is known) and first degree family members (both affected and unaffected) are encouraged. Especially —

- ◆ Metabolic disorders
- ◆ Mitochondrial disorders
- ◆ DNA Repair disorders
- ◆ Dysmorphology
- ◆ Extended families with well-characterized disorders

Chromosomal Abnormalities

Samples with well-defined clinical profiles and well-characterized chromosomal abnormalities are requested. Especially —

- ◆ Chromosomal anomalies associated with clinical disorders
- ◆ Microdeletions and microduplications
- ◆ Subtelomeric deletions or translocations

Human Variation Collection

Additional ethnic populations are accepted into the collection when they have been collected according to current guidelines (see http://www.nih.gov/sigs/bioethics/named_populations.html). Please contact us about these projects.