Stem Cell Research

As part of the processing services at Sampled we offer a variety of stem cell and gene editing services.
Stem Cell research services

Stem cells and iPSCs can be used as a powerful tool in regenerative medicine, drug discovery, disease modelling, and to study development.

At Sampled we strive to provide researchers with highly characterized, functional cells that can be purchased “off the shelf” or reprogrammed/edited to suit your needs.

Source Cell Services
- Pre-assembled and barcoded kits for the collection of primary cells for the purpose of iPSC generation such as skin punches, nasal epithelial or blood
- Isolation, expansion, and cryopreservation of primary cells
- Comprehensive Quality Control of all Source Cell Lines includes mycoplasma testing & identity verification using the SNPTrace™ Panel
- Distribution of Source Cell Lines as cryopreserved ampules

Reprogramming Services
- Utilizing a variety of primary source cell types, including fibroblasts, olfactory epithelial cells, lymphocytes, and lymphoblastoid cell lines
- Footprint-free reprogramming using Sendai or episomal vectors optimized for reprogramming efficiency and economy.
- Distribution of iPSC Lines as cryopreserved ampules

Gene Editing Services
- Various modifications available
  - Small random Indels through Non-Homologous End Joining (NHEJ)
  - Large genomic fragments deletion using 2 sgRNAs
  - Precise point mutation/small deletion/insertion through Homology Directed Repair (HDR)
  - Knock-in/reporter through HDR
- Rigorous Quality Control
  - Sanger sequencing of potential off-target loci
  - Guaranteed clonality, sterility and viability

iPSC Quality Control Services
As part of iPSC quality control services, we offer bundled packages or a la carte services that includes:
- Viability and sterility including mycoplasma testing
- Identity verification using SNP tracing arrays
- Analysis of pluripotency markers
- G-banded karyotyping

Distribution Services
As part of distribution services, iPSCs derived in client laboratories can be expanded, subjected to quality control analysis, and cryopreserved for storage and distribution.

NINDS Human Cell & Data Repository
The National Institute of Neurological Disorders and Stroke (NINDS) is committed to providing well characterized cell sources to academic and industry investigators. Cell sources currently include fibroblasts and/or iPSCs for many neurodegenerative disorders and healthy controls.

NINDS collaborative projects and collections also include:
- GMP iPSC – This line has been approved for use in clinical trials in the EU and its research grade sister cell line can be used by investigators in proof of principle assays prior to clinical studies.
- NeuroLINCS
- Target ALS
- NIH RMP
- Myotonic Dystrophy Foundation
- Isogenic iPSC Pairs

NIMH Repository & Genetics Resource
The NIMH stem cell collection currently contains 681 subjects, of which 295 are iPSC lines and 586 are fibroblast cells and represents a number of mental health disorders, some of which are shown below.
Contact NIMH.genomics.resources@mail.nih.gov for more questions.

You can visit the NHCDR catalog at stemcells.nindsgenetics.org and/or contact NINDS@sampled.com for more information.

Stem cells and iPSCs can be used as a powerful tool in regenerative medicine, drug discovery, disease modelling, and to study development.

At Sampled we strive to provide researchers with highly characterized, functional cells that can be purchased “off the shelf” or reprogrammed/edited to suit your needs.

Source Cell Services
- Pre-assembled and barcoded kits for the collection of primary cells for the purpose of iPSC generation such as skin punches, nasal epithelial or blood
- Isolation, expansion, and cryopreservation of primary cells
- Comprehensive Quality Control of all Source Cell Lines includes mycoplasma testing & identity verification using the SNPTrace™ Panel
- Distribution of Source Cell Lines as cryopreserved ampules

Reprogramming Services
- Utilizing a variety of primary source cell types, including fibroblasts, olfactory epithelial cells, lymphocytes, and lymphoblastoid cell lines
- Footprint-free reprogramming using Sendai or episomal vectors optimized for reprogramming efficiency and economy.
- Distribution of iPSC Lines as cryopreserved ampules

Gene Editing Services
- Various modifications available
  - Small random Indels through Non-Homologous End Joining (NHEJ)
  - Large genomic fragments deletion using 2 sgRNAs
  - Precise point mutation/small deletion/insertion through Homology Directed Repair (HDR)
  - Knock-in/reporter through HDR
- Rigorous Quality Control
  - Sanger sequencing of potential off-target loci
  - Guaranteed clonality, sterility and viability

iPSC Quality Control Services
As part of iPSC quality control services, we offer bundled packages or a la carte services that includes:
- Viability and sterility including mycoplasma testing
- Identity verification using SNP tracing arrays
- Analysis of pluripotency markers
- G-banded karyotyping

Distribution Services
As part of distribution services, iPSCs derived in client laboratories can be expanded, subjected to quality control analysis, and cryopreserved for storage and distribution.

NINDS Human Cell & Data Repository
The National Institute of Neurological Disorders and Stroke (NINDS) is committed to providing well characterized cell sources to academic and industry investigators. Cell sources currently include fibroblasts and/or iPSCs for many neurodegenerative disorders and healthy controls.

NINDS collaborative projects and collections also include:
- GMP iPSC – This line has been approved for use in clinical trials in the EU and its research grade sister cell line can be used by investigators in proof of principle assays prior to clinical studies.
- NeuroLINCS
- Target ALS
- NIH RMP
- Myotonic Dystrophy Foundation
- Isogenic iPSC Pairs

NIMH Repository & Genetics Resource
The NIMH stem cell collection currently contains 681 subjects, of which 295 are iPSC lines and 586 are fibroblast cells and represents a number of mental health disorders, some of which are shown below.
Contact NIMH.genomics.resources@mail.nih.gov for more questions.

You can visit the NHCDR catalog at stemcells.nindsgenetics.org and/or contact NINDS@sampled.com for more information.

Stem cells and iPSCs can be used as a powerful tool in regenerative medicine, drug discovery, disease modelling, and to study development.

At Sampled we strive to provide researchers with highly characterized, functional cells that can be purchased “off the shelf” or reprogrammed/edited to suit your needs.

Source Cell Services
- Pre-assembled and barcoded kits for the collection of primary cells for the purpose of iPSC generation such as skin punches, nasal epithelial or blood
- Isolation, expansion, and cryopreservation of primary cells
- Comprehensive Quality Control of all Source Cell Lines includes mycoplasma testing & identity verification using the SNPTrace™ Panel
- Distribution of Source Cell Lines as cryopreserved ampules

Reprogramming Services
- Utilizing a variety of primary source cell types, including fibroblasts, olfactory epithelial cells, lymphocytes, and lymphoblastoid cell lines
- Footprint-free reprogramming using Sendai or episomal vectors optimized for reprogramming efficiency and economy.
- Distribution of iPSC Lines as cryopreserved ampules

Gene Editing Services
- Various modifications available
  - Small random Indels through Non-Homologous End Joining (NHEJ)
  - Large genomic fragments deletion using 2 sgRNAs
  - Precise point mutation/small deletion/insertion through Homology Directed Repair (HDR)
  - Knock-in/reporter through HDR
- Rigorous Quality Control
  - Sanger sequencing of potential off-target loci
  - Guaranteed clonality, sterility and viability

iPSC Quality Control Services
As part of iPSC quality control services, we offer bundled packages or a la carte services that includes:
- Viability and sterility including mycoplasma testing
- Identity verification using SNP tracing arrays
- Analysis of pluripotency markers
- G-banded karyotyping

Distribution Services
As part of distribution services, iPSCs derived in client laboratories can be expanded, subjected to quality control analysis, and cryopreserved for storage and distribution.

NINDS Human Cell & Data Repository
The National Institute of Neurological Disorders and Stroke (NINDS) is committed to providing well characterized cell sources to academic and industry investigators. Cell sources currently include fibroblasts and/or iPSCs for many neurodegenerative disorders and healthy controls.

NINDS collaborative projects and collections also include:
- GMP iPSC – This line has been approved for use in clinical trials in the EU and its research grade sister cell line can be used by investigators in proof of principle assays prior to clinical studies.
- NeuroLINCS
- Target ALS
- NIH RMP
- Myotonic Dystrophy Foundation
- Isogenic iPSC Pairs

NIMH Repository & Genetics Resource
The NIMH stem cell collection currently contains 681 subjects, of which 295 are iPSC lines and 586 are fibroblast cells and represents a number of mental health disorders, some of which are shown below.
Contact NIMH.genomics.resources@mail.nih.gov for more questions.

You can visit the NHCDR catalog at stemcells.nindsgenetics.org and/or contact NINDS@sampled.com for more information.
For more information on our Stem Cell research services visit

sampled.com/scr

30 Knightsbridge Road, Building 3
Piscataway, NJ 08854

T: +1 908 460 8443
E: info@sampled.com