

Resource Summary Report

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University of California at San Francisco Embryonic Stem Cell Targeting Core Facility

RRID:SCR_017902

Type: Tool

Proper Citation

University of California at San Francisco Embryonic Stem Cell Targeting Core Facility
(RRID:SCR_017902)

Resource Information

URL: <https://escore.ucsf.edu/>

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Description: Core provides ES cell services with high probability of germline transmission. Offers ES cell targeting, genomic DNA extraction from 96-well plates, expansion of targeted ES cells, chromosome counts, and preparation of ES cells for microinjection. Prior to initiation of project, consultation is available on entire procedures of generating knockout mice. Core works with Gladstone Transgenic Gene Targeting Core for your microinjections to deliver full-range gene targeting service; CRISPR gRNA cloning, Cell-based functional test to identify best-performing TALENs or sgRNAs for your gene-editing experiment via mismatch-based assays such as Surveyor or T7E1; In vitro RNA synthesis - can help to make RNAs for your zygote injection or RNA transfection. We have TALEN and Cas9 plasmids with either T7 or T3 promoter subcloned in for efficient in vitro synthesis. sgRNAs for CRISPR can be synthesized off T7-sgRNA PCR product. Quality of synthesized RNAs will be checked via bioanalyzer; Custom TALEN to make double-strand breaks in genome; ES cell targeting (feeder-independent). Investigators targeting construct will be electroporated by core personnel. We have two feeder-independent ES cell lines, E14 (129-derived) and JM8A3.N1 (C57BL/6-derived) you can choose from. After drug selection for about one week, up to 300 colonies will be picked. When they are about to be confluent, we will split them as duplicate, one master plate to freeze for future expansion of positive clones and one plate for genotyping to identify targeted ES cell clones. Your plates for genotyping will be ready for pick-up 2-3 weeks after electroporation date. Genomic DNA extraction from ES cells on 96-well plate; Expansion of targeted clones from core targeting (up to 5 clones), A maximum of 5 positive clones will be thawed from 96-well plates and expanded to 6-wells. We will freeze 5

vials (each about 1 million)/clone for future use and give you 1 vial-equivalent cells to validate your genotyping before injection. It takes about 10 days to expand and freeze down cells;Expansion of ES cells from outside resources (per clone) Investigators provide one vial of frozen ES cells with information about culture condition from original resource. We will revive, nurture, and refreeze ES cells (5 vials) when they are ready. In addition, we will give you 1~2 million cells for your genotyping verification;Preparation for microinjection;Chromosome counting;Custom services.

Synonyms: UCSF ES Cell Targeting Core

Resource Type: core facility, service resource, access service resource

Keywords: Cell, targeting, embryonic, stem, cell, germline, transmission, genomic, DNA, extraction, microinjection, knockout, mouse, generation, project, consultation, custom, service, core, ABRF

Availability: Restricted

Resource Name: University of California at San Francisco Embryonic Stem Cell Targeting Core Facility

Resource ID: SCR_017902

Alternate IDs: ABRF_779

Ratings and Alerts

No rating or validation information has been found for University of California at San Francisco Embryonic Stem Cell Targeting Core Facility.

No alerts have been found for University of California at San Francisco Embryonic Stem Cell Targeting Core Facility.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.