Resource Summary Report

Generated by NIF on Jul 30, 2026

G608G lamin A minigene

RRID:Addgene_20292
Type: Plasmid

Proper Citation

RRID:Addgene_20292

Plasmid Information

URL: http://www.addgene.org/20292

Proper Citation: RRID:Addgene_20292

Insert Name: lamin A

Organism: Homo sapiens

Bacterial Resistance: Kanamycin

Defining Citation: PMID:15750600

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:4700; Vector Backbone:pEGFP-C1; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Comments: To generate the wt lamin A minigene, intron 11 was first introduced between exon 11 and exon 12 in the lamin A cDNA in pEGFP-lamin A using a multi-step PCR reaction. In the fist step a region of the lamin A gene containing the last 156 bp of exon 11, intron 11 and the first 31 bp of exon 12 was amplified by PCR from genomic DNA obtained from HeLa cells, using the primers: LMNA-mini11wtF (5'-GCCCAGGTGGGCGGACCCATC-3')/LMNA-mini12R (5'-CAGATTACATGATGCTGCAGTTCTG-3'). In the second step, a region of pEGFP-lamin A from the last 37 bp of exon 9 to the mutated region in exon 11 was amplified using the primers LMNA-mini9F/LMNA-mini11wtR (5'-GATGGGTCCGCCCACCTGGGC-3'). In the third step a region of pEGFP-lamin A containing the last 240 bp of exon 12 was amplified using the primers: LMNA-mini12F (5'-CAGAACTGCAGCATCATGTAATCTG-3')/ GFPvectorR. The PCR products obtained from the first and third steps were mixed and used in a fourth PCR reaction in the presence of the primers LMNA-mini11wtF/GFPvectorR. The obtained PCR product was then mixed with the product obtained from the second step and used in a fifth PCR reaction with the primers: LMNA-mini9F/ GFPvectorR. The final amplification product was cloned into the BsiWI/XbaI site of pEGFP-lamin A to obtain wt pEGFP-lamin Aintr11. To generate the minigene wt pEGFP-

lamin Aintr11 was digested with EcoRI and BstWI enzymes to remove a region of lamin A cDNA from exon 1 to the first 91 bp of exon 9, filled with Klenow enzyme and self-ligated. The mutated minigene was generated with the same procedure, substituting primers LMNA-mini11wtF e LMNA-mini11wtR respectively with: LMNA-mini11mutF (5'-GCCCAGGTGGGTGGACCCATC-3') and LMNA-mini11mut R (5'-GATGGGTCCACCCACCTGGGC-3').

Plasmid Name: G608G lamin A minigene

Relevant Mutation: G606G:GGC>GGT Mutation causes aberrant splicing event, creating a mutant protein, delta50 lamin A, containing a 50 aa internal deletion in its globular tail domain.

Record Creation Time: 20220422T222050+0000

Record Last Update: 20260725T074417+0000

Ratings and Alerts

No rating or validation information has been found for G608G lamin A minigene.

No alerts have been found for G608G lamin A minigene.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We have not found any literature mentions for this resource.