Resource Summary Report

Generated by dkNET on Aug 21, 2026

human CRKL transgenic construct

RRID:Addgene_38186
Type: Plasmid

Proper Citation

RRID:Addgene_38186

Plasmid Information

URL: http://www.addgene.org/38186

Proper Citation: RRID:Addgene_38186

Insert Name: CRKL

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: PMID:11245441

Vector Backbone Description: Backbone Size:3500; Vector Backbone:pSL1180; Vector Types:mouse transgenic; Bacterial Resistance:Ampicillin

Comments: This construct was made by Arnoud van Wijk. It can be used to make transgenic mice. The DNA construct contains 7.5 kb of human CRKL locus 5' sequences including the promoter of the human v-crk sarcoma virus CT10 oncogene homolog (CRKL) gene, joined to CRKL exon 1. Part of the intron between exons 1 and 2 encompassing around 8-kb is included and exons 2-3 as cDNA. The entire insert is around 17 kb and can be isolated free from plasmid sequences in a Kpn I x Mlu I digestion. Jackson labs stock no. 017834 is one of our CRKL transgenics containing approximately 5 copies of this transgene. CRKL overexpressing transgenics are viable but mice with high copy numbers have reduced fertility. How the CRKL transgenic construct was made: (verbatim from PMID 11245441): Human genomic clone 70 (PMID 7905853) contains 12 kb of 5' sequences, exon 1, and 6.6 kb of intron 1 of the CRKL gene. A 350-bp RsaI fragment isolated from a CRKL cDNA (GenBank accession no. X59656) was used as a probe to specifically isolate a phage clone, CR-4, containing CRKL exon 2 flanked by 6.5 kb of intron 1 and 9.5 kb of intron 2. CRKL is located on human chromosome 22 and has been entirely sequenced; introns 1 and 2 are both around 15.5 kb. To generate a transgenic DNA construct, a 7-kb SalI-BamHI fragment from CR-4, which included a SalI site at the 5' end from the phage polylinker and the 3' BamHI site located in exon 2, was ligated with a 0.78-kb BamHI-EcoRI cDNA fragment, including

exons 2, 3, and the 3’ untranslated region, into pSK digested with SalIxEcoRI. The insert was removed as a 7.7-kb SalI-NotI fragment and ligated with a 1.2-kb SstII-SalI fragment from intron 1 in clone 70 into pSK digested with SstII x NotI. The resulting insert was removed by digestion with SstII x NotI. The 5’ promoter and exon 1 sequences were isolated on an 8-kb EcoRI-SstII fragment that was subcloned into pSK digested with EcoRI x SstII; the insert was removed as an 8-kb KpnI-SstII fragment. The 8-kb KpnI-SstII fragment plus the 7.7-kb SstII-NotI fragment were ligated into pSL1180 digested with KpnI x NotI.

Plasmid Name: human CRKL transgenic construct

Relevant Mutation: Contains human CRKL introns

Record Creation Time: 20220422T222201+0000

Record Last Update: 20260815T081420+0000

Ratings and Alerts

No rating or validation information has been found for human CRKL transgenic construct.

No alerts have been found for human CRKL transgenic construct.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We have not found any literature mentions for this resource.