

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

pBS-L1PA1-CH-mneo

RRID:Addgene_51288

Type: Plasmid

Proper Citation

RRID:Addgene_51288

Plasmid Information

URL: <http://www.addgene.org/51288>

Proper Citation: RRID:Addgene_51288

Insert Name: L1

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21572950](#)

Vector Backbone Description: Backbone Marker:Stratagene; Vector Backbone:pBluescript II; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: L1 is tagged with neol indicator cassette containing an inverted neomycin resistance gene. The SV40 promoter (SV40p) drives transcription of the neomycin gene which is disrupted by an intron in the opposite orientation that renders it non-functional. The intron is only spliced out from tagged L1 transcripts generated by the CMV promoter. When retrotransposition of the spliced L1 RNA occurs, the new insert will contain a functional neo gene that is expressed from the SV40 promoter. The L1 open reading frames were codon optimized using Primo Optimum 3.4 (<http://www.changbioscience.com/primo/pri?moo.html>), which makes synonymous changes to optimal codons within the nucleotide sequence. A 63 bp inter-ORF with 92% sequence identity to L1RP was utilized for all constructs. Sequence changes to this region were generated to introduce restriction enzyme sites used for plasmid construction. The optimized nucleotide sequence is 74.9% identical to the sequence of L1RP.

Plasmid Name: pBS-L1PA1-CH-mneo

Record Creation Time: 20220422T222302+0000

Record Last Update: 20260815T081612+0000

Ratings and Alerts

No rating or validation information has been found for pBS-L1PA1-CH-mneo.

No alerts have been found for pBS-L1PA1-CH-mneo.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at [RRID](#) .

Zhang L, et al. (2021) Reverse-transcribed SARS-CoV-2 RNA can integrate into the genome of cultured human cells and can be expressed in patient-derived tissues. Proceedings of the National Academy of Sciences of the United States of America, 118(21).

Zhang L, et al. (2020) SARS-CoV-2 RNA reverse-transcribed and integrated into the human genome. bioRxiv : the preprint server for biology.

Damert A, et al. (2020) LINE-1 ORF1p does not determine substrate preference for human/orangutan SVA and gibbon LAVA. Mobile DNA, 11, 27.

Wagstaff BJ, et al. (2018) Reviving a 60 million year old LINE-1 element. Gene reports, 11, 74.