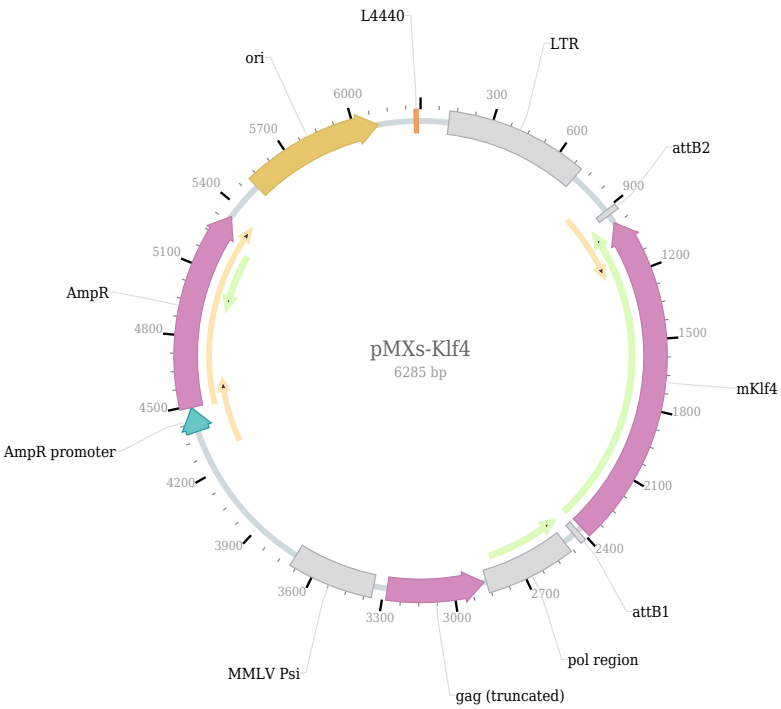
pMXs-Klf4

Vector ID	V006689
Antibiotic Resistance	Ampicillin
Length	6285 bp
Vector Type	Mammalian Expression, Retroviral

Product Information

Replication Origin	ori
Copy Number	High Copy
5' Primer	pMX-S1811 (5'-GACGGCATCGCAGCTTGGATACAC-3')
3' Primer	LNCX-3 (5'-ACCTACAGGTGGGGTCTTTCATTCCC-3')
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pMXs-Klf4 is a Moloney murine leukemia virus (MMLV)-based retroviral expression plasmid carrying the mouse Klf4 cDNA. Its 5′ LTR drives transgene expression, and the viral genome enables stable genomic integration in dividing cells, giving high transduction efficiency. A key reagent from Yamanaka's lab (available via Addgene), it is co-transduced with Oct4, Sox2 and c-Myc to reprogram fibroblasts into induced pluripotent stem cells (iPSCs).

Vector Map



Plasmid Resuspension Protocol

1. Centrifuge at 5,000×g for 5 min.
2. Carefully open the tube and add sterile water to dissolve the DNA: add 20 µl for 5 µg plasmid, and 100 µl for 100 µg plasmid.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
5. Store the plasmid at -20 ℃.