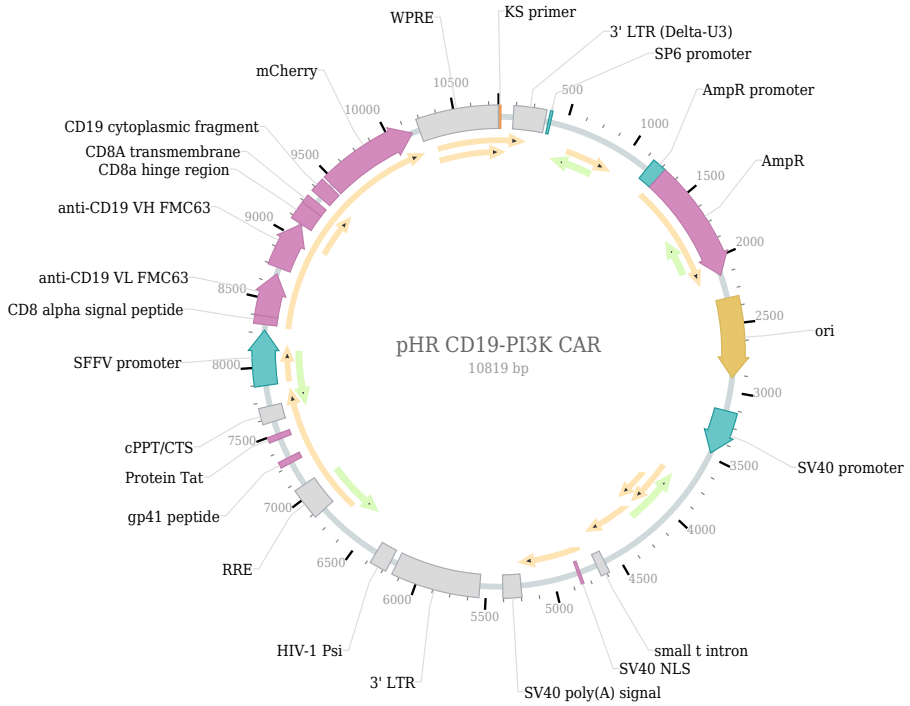
pHR CD19-PI3K CAR

Vector ID	V016691
Antibiotic Resistance	Ampicillin
Length	10819 bp
Vector Type	Protein expression, Antibody expression
Host	Mammalian cells, Lentivirus

Product Information

Replication Origin	ori
Promoter	SFFV
Growth Strain(s)	Stbl3
Growth Temperature	37℃
Comment	pHR CD19-PI3K CAR is a pHRSIN-based lentiviral CAR-P construct designed for macrophage reprogramming. It consists of anti-CD19 scFv, CD8 transmembrane domain and a sole CD19 cytoplasmic fragment recruiting PI3K p85 subunit, labeled with mCherry reporter. This single PI3K motif alone induces moderate whole-cell engulfment of CD19-positive Raji lymphoma cells, comparable to FcRγ CAR-P. It serves as a control component to build tandem CAR-P with FcRγ for boosted full cancer cell clearance.

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 ℃.