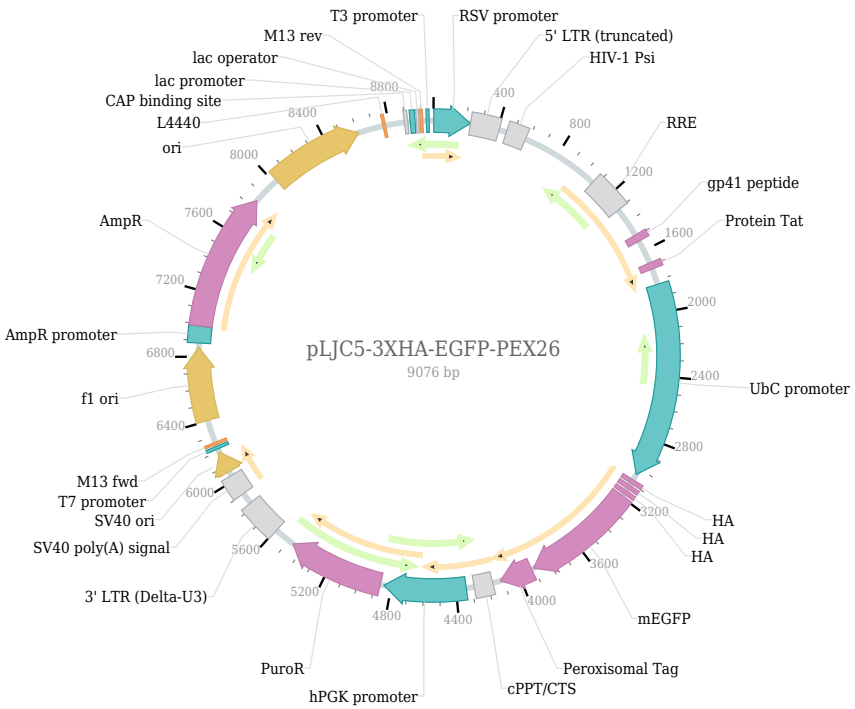
pLJC5-3XHA-EGFP-PEX26

Vector ID	V012108
Accession ID	HA-PEROXO
Antibiotic Resistance	Ampicillin
Length	9076 bp
Vector Type	Lentiviral

Product Information

Replication Origin	ori
Selection Marker	Puromycin
Promoter	UbC
Cloning Method	Restriction Enzyme
5' Primer	TGAAGCTCCGGTTTTGAACT
Comment	pLJC5-3XHA-EGFP-PEX26 is a lentiviral plasmid also named HA-PEROXO, driven by the UBC promoter to express a chimeric peroxisome-targeted fusion protein. This fusion protein consists of tandem 3XHA epitopes, monomeric EGFP and the peroxisomal membrane-targeting fragment of human PEX26, which inserts the tag into peroxisomal membranes in human cells. Cells transduced with this construct enable the PEROXO-IP workflow, using anti-HA magnetic beads to isolate intact peroxisomes within ~10 minutes after cell homogenization for proteomic research. Its expression barely disturbs endogenous peroxisome morphology and protein levels, serving as a specific tool for rapid peroxisome purification compared with traditional density-gradient centrifugation methods.

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 ℃.