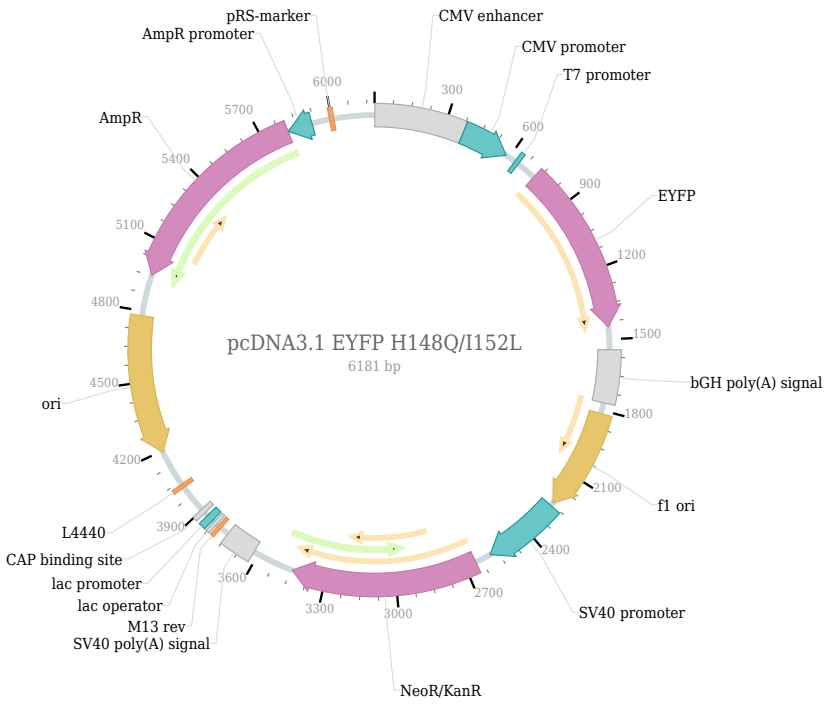
pcDNA3.1 EYFP H148Q/I152L

载体编号 Vector ID	V001203
抗性 Antibiotic Resistance	Ampicillin
长度 Length	6181 bp
载体类型 Vector Type	Mammalian Expression

产品信息

复制子 Replication Origin	ori
来源 Source/Author	Peter Haggie Lab
筛选标记 Selection Marker	Neomycin (select with G418)
拷贝数 Copy Number	High Copy
启动子 Promoter	SV40
克隆方法 Cloning Method	Restriction Enzyme
5' 引物 5' Primer	CMV-F
3' 引物 3' Primer	BGHrev
培养菌株 Growth Strain(s)	DH10B
培养温度 Growth Temperature	37℃
备注 Comment	The plasmid vector pcDNA3.1 EYFP H148Q/I152L is a mammalian expression vector designed for genetically encoded halide sensing. It is based on the pcDNA3.1 backbone and encodes an Enhanced Yellow Fluorescent Protein (EYFP) variant containing the mutations H148Q and I152L. These mutations significantly improve the protein's sensitivity to anions, particularly chloride and iodide, by altering the halide binding site near the chromophore, making it a useful tool for studying ion transport in live cells.

质粒图谱



复溶方法

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 ℃.