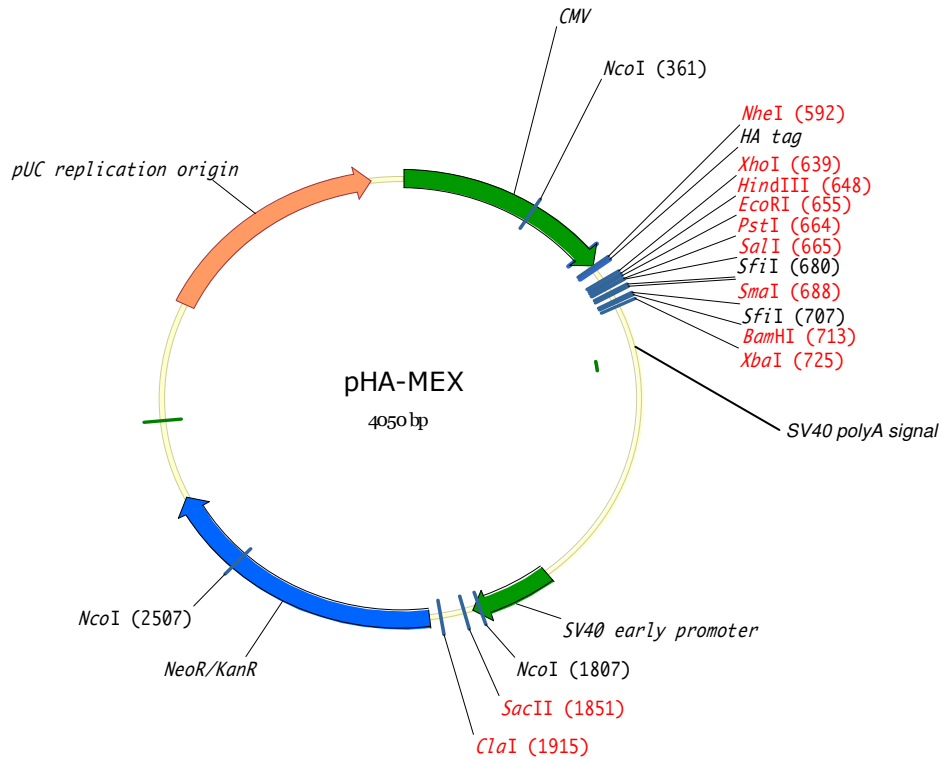


**pHA-MEX mammalian expression vector****P03401**

```

                                     Pst I
                                     -----
                                     Xho I   Hind III   EcoR I       Sal I       Sfi I
                                     -----
atg tac cca tac gat gtt cca gat tac gct ccc aga tct cga gct caa gct tcg aat tct gca gtc gac ccg gcc att
M   Y   P   Y   D   V   P   D   Y   A   P   R   S   R   A   Q   A   S   N   S   A   V   D   P   A   I
----->
HA epitope tag

                                     Sma I           Sfi I       BamH I       Xba I
                                     -----
acg gcc ccc ggg tta att aag gcc gcc tcg gcc gga tcc acc gga tct aga
T   A   P   G   L   I   K   A   A   S   A   G   S   T   G   S   R

```

**Vector features**

Position	Feature	Position	Feature
Start: 1 End: 589	CMV promoter	Start: 1946 End: 2740	NeoR/KanR coding sequence
Start: 601 End: 633	HA epitope tag	Start: 3325 End: 3968	pUC origin of replication
Start: 872 End: 905	SV40 polyadenylation signal		
Start: 1598 End: 1827	SV40 early promoter		

Use of the Sfi I cloning strategy is licensed under U.S. Patent No. 5,595,895 assigned to the National Institutes of Health.  
The CMV promoter is covered under U.S. Patent Nos. 5,168,062, and 5,385,839 assigned to the University of Iowa Research Foundation.