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ProductInformation

pcDNA 3.1 (-) MycHisC
Expression Vector

Product Number **E0648**
Store at -20°C

Product Summary:
Package Size: 20 mg
Lyophilized in 10 mM Tris-HCl and
1 mM EDTA pH 7.5
Plasmid Size: 5.5 kb
Antibiotic Resistance: Ampicillin and Neomycin
Resuspend the expression vector in 0.2 µm filtered water.

Description:
pcDNA3.1 (-)/myc-his C is an expression vector that contains the strong CMV enhancer-promoter for high level expression of recombinant proteins.

pcDNA3.1(-)/myc-his C expression vector gene for the expression of a myc-his tag for detection of the recombinant protein.

The pcDNA3.1(-)/myc-his C expression vector contains a multiple cloning site for easy cloning.

Restriction endonuclease digestion of supercoiled pcDNA 3.1(-)/myc-his C yields the following fragments: Apa I (5500 bp), Xba I 5,500) and SnaB I (5,088, 412 bp).

pcDNA3.1(-) /myc-his C expression vector has a multiple cloning site in an opposite orientation from the pcDNA3.1(+). The vector is supplied in one of three reading frames to facilitate in frame cloning with a C-terminal tag containing a polyhistidine metal-binding region and the myc (c-myc) epitope. The human cytomegalovirus immediate-early (CMV) promoter provides high-level expression in many mammalian cells. Also, the vector will replicate in cell lines which are infected with SV40.

T7 Multiple Cloning Site
Nhe I
Pme I
Apa I
Xba I
Xho I
Not I
BstX I
EcoR V
EcoR I
BstX I
BamH I
Asp718 I
Kpn I
Hind III
Apa I
Xba I
Myc epitope
His_6
Term
Pme I

Additional Information:
To ensure proper expression of your recombinant protein, you must clone your gene in frame with the C-terminal peptide. The vector can be used with two additional vectors to facilitate cloning of the gene in frame.

The expression vectors are:

E0398 pc DNA3.1(-) MycHis A
and E0523 pcDNA3.1(-) MycHisB

Features of pcDNA3.1 (-)/Myc-His C	**Benefits of pcDNA3.1(-)/Myc-His C**
Human cytomegalovirus (CMV) immediate-early promoter/enhancer.	Permits efficient, high-level expression of recombinant protein.
T7 promoter/priming site	Allows for *in vitro* transcription in the sense orientation and sequencing through the insert.
Multiple cloning site	Allows insertion of your gene and facilitates cloning in frame with the polyhistidine C-terminal tag.
Myc epitope (c-myc)	Allows detection of the recombinant protein.
C-terminal polyhistidine tag	Permits purification of the recombinant protein on metal chelating resins.
pcDNA3.1/BGH reverse priming site	Permits sequencing through the insert.
Bovine growth hormone (BGH) polyadenylation signal	Efficient transcription termination and polyadenylation of mRNA.
F1 origin	Allows rescue of single-DNA.
Neomyocin (G418) resistance gene	Selection of stable transfectantts in mammalisan cells
SV40 polyadenylation signal	Efficient transcription termination and polyadenylation of mRNA
ColE1 origin (pUC-derived)	High copy number replication and growth in *E. coli*
Ampicillin resistance gene (β-lactamase)	Selection of vector in *E. coli*
SV40 early promoter and origin	Allows efficient, high-level expression of neomycin resistance gene and episomal replication in cells expressing SV40 large T antigen.