-online.com **QENOMICS**





Human MRO cDNA Clone in Bacterial Expression Vector (His-MBP)

Gene: MRO Species: Human Fusion tag: His-MBP Insert: cDNA Vector: Bacterial Expression Vector Application: Cloning (Clon) Product Details Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: 17 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Overview	
Fusion tag: His-MBP Insert: cDNA Vector: Bacterial Expression Vector Application: Cloning (Clon) Product Details Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: GCTAGTTATTGCTCAGCGG-3* Target Details	Quantity:	500 ng
Fusion tag: His-MBP Insert: cDNA Vector: Bacterial Expression Vector Application: Cloning (Clon) Product Details Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Gene:	MRO
Insert: cDNA Vector: Bacterial Expression Vector Application: Cloning (Clon) Product Details Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag. Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Species:	Human
Vector: Bacterial Expression Vector Application: Cloning (Clon) Product Details Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-GCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Fusion tag:	His-MBP
Application: Cloning (Clon) Product Details Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Insert:	cDNA
Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Vector:	Bacterial Expression Vector
Purpose: Bacterial expression of Human MRO with His-MBP Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Application:	Cloning (Clon)
Insert Length: 747 bp Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Product Details	
Vector Backbone: pPB-His-MBP Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Purpose:	Bacterial expression of Human MRO with His-MBP
Promoter: T7 Promoter Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Insert Length:	747 bp
Bacterial Resistance: Kanamycin Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Vector Backbone:	pPB-His-MBP
Expression Type: Transient Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Promoter:	T7 Promoter
Specificity: 5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Bacterial Resistance:	Kanamycin
Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Expression Type:	Transient
cleavable with Thrombin (Size 43 kDa) Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details	Specificity:	5-Nhel and 3-Xhol
Sequencing Primer: MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3' Target Details		Fusion tag: Dual N-terminal tag, 6X Histidine followed by Maltose Binding Protein which is
GCTAGTTATTGCTCAGCGG-3' Target Details		cleavable with Thrombin (Size 43 kDa)
Target Details	Sequencing Primer:	MBP Forward primer: 5'-CGCAGATGTCCGCTTTCTGG-3', T7 terminator primer: 5'-
		GCTAGTTATTGCTCAGCGG-3'
Gene: MRO	Target Details	
	Gene:	MRO

MRO (MRO Products)

Application Details

Application Notes:

The pPB vectors are low-medium copy number vectors in which the gene expression is driven by the strong T7 promoter.

Below are some basic guidelines for using the pPB vectors for protein production:

- 1. The pPB vectors are designed to be used with E. coli strains that are DE3 lysogens i.e. the host E. coli cell has a source of T7 RNA polymerase.
- 2. Recombinant protein induction is usually done at OD600 of 0.6-1.2 using Isopropyl β-D-1thiogalactopyranoside (IPTG) at a final concentration of 0.05 -1mM.
- 3. The ideal concentration of IPTG must be determined empirically for each recombinant protein/cell-line. Similarly, the length of time and temperature for induction provide other variables that need to be optimized on a case-to-case basis.
- 4. For toxic proteins, it is recommended to go for shorter induction time and also to try and suppress basal recombinant gene expression through (a) addition of glucose or use of pLysS plasmid. Please note that special cell-lines are also available in the market that cater to expression of toxic proteins.
- 5. Once grown for the desired length of time, harvest cells by centrifugation and either freeze the cells at -80°C (as such or after re-suspending in the desired buffer) or proceed with the purification.

Restrictions:

For Research Use only

Handling

Format:	Liquid
Buffer:	10 mM Tris-HCI, 1 mM EDTA, pH 8.0
Storage:	-20 °C
Storage Comment:	1 year when stored at -20° C or lower in a non-frost free freezer.
Expiry Date:	12 months

Publications

Product cited in:

Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)