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Datasheet for ABIN4830949

# **Human ERMAP cDNA Clone in Bacterial Expression Vector (His-GST)**

which is cleavable with TEV (Size 27.9 kDa)  Sequencing Primer: GST Forward primer: 5'-CACGTTTGGTGGCGAC3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3'  Target Details	Overview	
Species: Human  Fusion tag: His-GST  Insert: cDNA  Vector: Bacterial Expression Vector  Application: Cloning (Clon)  Product Details  Purpose: Bacterial expression of Human ERMAP with His-GST  Insert Length: 1428 bp  Vector Backbone: pPB-His-GST  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 Glutathione-S-Transferase Protein which is cleavable with TEV (Size 27.9 kDa)  Sequencing Primer: GST Forward primer: 5'-CACGTTTGGTGGTGGCGAC3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3'  Target Details	Quantity:	500 ng
Fusion tag: His-GST  Insert: cDNA  Vector: Bacterial Expression Vector  Application: Cloning (Clon)  Product Details  Purpose: Bacterial expression of Human ERMAP with His-GST  Insert Length: 1428 bp  Vector Backbone: pPB-His-GST  Promoter: T7 Promoter  Bacterial Resistance: Kanamycin  Expression Type: Transient  Specificity: 5-Nhel and 3-Xhol	Gene:	ERMAP
Insert: cDNA  Vector: Bacterial Expression Vector  Application: Cloning (Clon)  Product Details  Purpose: Bacterial expression of Human ERMAP with His-GST  Insert Length: 1428 bp  Vector Backbone: pPB-His-GST  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 Glutathione-S-Transferase Proteir which is cleavable with TEV (Size 27.9 kDa)  Sequencing Primer: GST Forward primer: 5'-CACGTTTGGTGGTGGCGAC3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3'  Target Details	Species:	Human
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Application: Cloning (Clon)  Product Details  Purpose: Bacterial expression of Human ERMAP with His-GST  Insert Length: 1428 bp  Vector Backbone: pPB-His-GST  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 Glutathione-S-Transferase Protein which is cleavable with TEV (Size 27.9 kDa)  Sequencing Primer: GST Forward primer: 5'-CACGTTTGGTGGTGGCGAC3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3'  Target Details	Insert:	cDNA
Purpose: Bacterial expression of Human ERMAP with His-GST  Insert Length: 1428 bp  Vector Backbone: pPB-His-GST  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 Glutathione-S-Transferase Protein which is cleavable with TEV (Size 27.9 kDa)  Sequencing Primer: GST Forward primer: 5'-CACGTTTGGTGGTGGCGAC3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3'  Target Details	Vector:	Bacterial Expression Vector
Purpose: Bacterial expression of Human ERMAP with His-GST  Insert Length: 1428 bp  Vector Backbone: pPB-His-GST  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 Glutathione-S-Transferase Protein which is cleavable with TEV (Size 27.9 kDa)  Sequencing Primer: GST Forward primer: 5'-CACGTTTGGTGGTGGCGAC3', T7 terminator primer: 5'-GCTAGTTATTGCTCAGCGG-3'  Target Details	Application:	Cloning (Clon)
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		GCTAGTTATTGCTCAGCGG-3'
Cono: EDMAD	Target Details	
CHIE. EKIVIAF	Gene:	ERMAP

#### **ERMAP (ERMAP 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  $\beta$ -D-1-thiogalactopyranoside (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)