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Datasheet for ABIN4699769

## **Human CES2 cDNA Clone in Bacterial Expression Vector (His-MBP)**

| Overview              |  |
|-----------------------|--|
| Quantity:             | 500 ng   |
| Gene:                 | CES2   |
| Species:              | Human  |
| Fusion tag:           | His-MBP  |
| Insert:               | cDNA   |
| Vector:               | Bacterial Expression Vector  |
| Application:          | Cloning (Clon)   |
| Product Details       |  |
| Purpose:              | Bacterial expression of Human CES2 with His-MBP  |
| Insert Length:        | 1872 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:                 | CES2   |

| Target Details      |  |
|---------------------|--|
| Abstract:           | CES2 Products  |
| NCBI Accession:     | NM_003869  |
| 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-HCl, 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)