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Datasheet for ABIN4845588

## **Mouse ACOT12 cDNA Clone in Bacterial Expression Vector (His-GST)**

| Overview              |   |
|-----------------------|---|
| Quantity:             | 500 ng  |
| Gene:                 | ACOT12  |
| Species:              | Mouse   |
| Fusion tag:           | His-GST   |
| Insert:               | cDNA  |
| Vector:               | Bacterial Expression Vector   |
| Application:          | Cloning (Clon)  |
| Product Details       |   |
| Purpose:              | Bacterial expression of Mouse Acot12 with His-GST   |
| Insert Length:        | 3049 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        |   |
| Gene:                 | ACOT12  |

## **Target Details** Acot12 (ACOT12 Products) Alternative Name: NCBI Accession: NM\_028790 **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-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)