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Datasheet for ABIN4759853 Human CAPN3 cDNA Clone in Bacterial Expression Vector (His tag)

Overview

| Quantity: | 500 ng |
|--------------|-----------------------------|
| Gene: | Calpain 3 (CAPN3) |
| Species: | Human |
| Fusion tag: | His tag |
| Insert: | cDNA |
| Vector: | Bacterial Expression Vector |
| Application: | Cloning (Clon) |

Product Details

| Purpose: | Bacterial expression of Human CAPN3 with His tag |
|-----------------------|---|
| Insert Length: | 930 bp |
| Vector Backbone: | pPB-N-His |
| Promoter: | T7 Promoter |
| Bacterial Resistance: | Kanamycin |
| Expression Type: | Transient |
| Specificity: | 5-Nhel and 3-Xhol Fusion tag: A singel N-terminal 6X-Histidine tag which is cleavable with Thrombin (Size 2.3 kDa) |
| Sequencing Primer: | T7 promoter primer: 5'-TAATACGACTCACTATAGGG-3', T7 terminator primer: 5'- GCTAGTTATTGCTCAGCGG-3' |

Target Details

| Gene: | Calpain 3 (CAPN3) |
|-------------------|------------------------|
| Alternative Name: | CAPN3 (CAPN3 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-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)