

## Product datasheet for **SC309487**

### Cathepsin E (CTSE) (NM\_148964) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Cathepsin E (CTSE) (NM_148964) Human Untagged Clone                                     |
| Tag:                      | Tag Free  |
| Symbol:                   | CTSE  |
| Synonyms:                 | CATE  |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| Fully Sequenced ORF:      | >SC309487 representing NM_148964.<br>Blue=Insert sequence Red=Cloning site Green=Tag(s) |

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GCTCGTTTGTGAACCGTCAGAATTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAAACGCTCCTTCTTTTGTGCTGGTCTCCTGGAGCTGGGAGAGGCCAAGGATCCCTTCACAGG
GTGCCCTCAGGAGGCATCCGTCCCTCAAGAAGAAGCTGCGGCACGGAGCCAGCTCTCTGAGTTCTGG
AAATCCCATAATTTGGACATGATCCAGTTCACCGAGTCTGTCAATGGACCAGAGTGCCAAGGAACCC
CTCATCAACTACTGGATATGGAATACTCGGCACTATCTCCATTGGCTCCCCACCACAGAACTTCACT
GTCATCTTCGACTGGCTCCTCAACCTCTGGTCCCCTCTGTGTACTGACTAGCCAGCCTGCAAG
ACGCACAGCAGGTTCCAGCCTTCCAGTCCAGCACATACAGCCAGCCAGGTCATCTTTCTCCATTCAG
TATGGAACCGGGAGCTTGTCCGGGATCATTGGAGCCGACCAAGTCTCTGTGGAAGGACTAACCGTGTT
GGCCAGCAGTTTGGAGAAAGTGTACAGAGCCAGGCCAGACCTTTGTGGATGCAGAGTTTGTGGAATT
CTGGGCCCTGGGATACCCCTCCTTGGCTGTGGGAGGAGTACTCCAGTATTTGACAACATGATGGCTCAG
AACCTGGTGGACTTGCCGATGTTTTCTGTCTACATGAGCAGTAACCCAGAAGGTGGTGGGGGAGCGAG
CTGATTTTGGAGGCTACGACCTCCATTTCTCTGGGAGCCTGAATTGGTCCCAGTACCAAGCAA
GCTTACTGGCAGATTGCACTGGATAATATGCTGTGGAGTGTGCCAACCTTAACGTCATGCCGGATGTCA
CCTTACCATTAAACGGAGTCCCCTATACCCTCAGCCAACTGCCTACACCCTACTGGACTTCGTGGATG
GAATGCAGTTCGACAGTGGCTTTCAAGGACTTGACATCCACCCTCCAGCTGGGCCCTCTGGATCC
TGGGGGATGTCTTCATTCGACAGTTTTACTCAGTCTTTGACCGTGGGAATAACCGTGTGGGACTGGCCC
CAGCAGTCCCCTAAGGAGGGCCTTGTGTCTGTGCCTGCCTGTCTGACAGACCTTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

Plasmid Map: □



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|                               |  |
|-------------------------------|--|
| <b>ACCN:</b>                  | NM_148964  |
| <b>Insert Size:</b>           | 1092 bp  |
| <b>OTI Disclaimer:</b>        | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).   |
| <b>OTI Annotation:</b>        | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.   |
| <b>Components:</b>            | The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).   |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>  |
| <b>RefSeq:</b>                | <u><a href="#">NM_148964.2</a></u>   |
| <b>RefSeq Size:</b>           | 2180 bp  |
| <b>RefSeq ORF:</b>            | 1092 bp  |
| <b>Locus ID:</b>              | 1510   |
| <b>UniProt ID:</b>            | <u><a href="#">P14091</a></u>  |
| <b>Cytogenetics:</b>          | 1q32.1   |
| <b>Protein Families:</b>      | Druggable Genome, Protease   |
| <b>Protein Pathways:</b>      | Lysosome   |
| <b>MW:</b>                    | 39.6 kDa   |
| <b>Gene Summary:</b>          | <p>This gene encodes a member of the A1 family of peptidases. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate the mature enzyme. This enzyme, an aspartic endopeptidase, may be involved in antigen processing and the maturation of secretory proteins. Elevated expression of this gene has been observed in neurodegeneration. [provided by RefSeq, Nov 2015]</p> <p>Transcript Variant: This variant (2) lacks an alternate exon in the 3' coding region resulting in a frameshift compared to variant 1. The encoded isoform (b) is shorter and has a distinct C-terminus compared to isoform a. This isoform (b) may undergo proteolytic processing but exhibits reduced enzymatic activity compared to isoform a.</p> |