

## Product datasheet for **MC204811**

### Ethe1 (NM\_023154) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ethe1 (NM\_023154) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Ethe1  
**Synonyms:** 0610025L15Rik; Hsco  
**Mammalian Cell Selection:** Neomycin  
**Vector:** PCMV6-Kan/Neo (PCMV6KN)  
**E. coli Selection:** Kanamycin (25 ug/mL)

**Fully Sequenced ORF:** >BC083162  
 GCGATGGCGAGCGCGGTCTGTAGGGTCGCCGGCGGGCGGTGAGCCAGCAAAGCGCATCCGGAGCCCCGG  
 TCCTCCTGCGGCAGATGTTTGAACCCAAGAGCTGCACCTATACCTACCTTCTGGGTGACCGGGAGTCAAG  
 AGAGGCAGTTCTGATCGACCCCGTTCTGGAGACAGCGCATCGGGATGCTCAGTTGATTAAGGAGCTGGGG  
 CTCAAGCTGTTGTACGCTGTGAACACTCACTGCCATGCTGACCACATCACCGGCACGGGGTTCTCCGGT  
 CCCTGCTCCCGGGCTGCCAGTCTGTCTATCTCCGCCTCAGCGGAGCCCAGGCTGATTTGCATATCGGGGA  
 AGGTGATTCCATCCGCTTTGGACGCTTTGCTTTGGAGACTCGAGCCAGCCCTGGCCACACTCCAGGCTGT  
 GTCACCTTTGTCCTGAACGACCAGAGCATGGCCTTCACTGGAGATGCCCTGCTGATCCGAGGGTGTGGAC  
 GGACAGACTTCCAACAAGGCTGTGCTAAGACTTTGTACCACTCTGTGCACGAGAAGATCTTCACACTTCC  
 AGGCAACTGTCTAATCTACCCGGCTCACGATTACCACGGGCTCACAGTTTCTACTGTGGAGGAGGAACGG  
 ACTCTGAACCCACGGCTTACCCTCAGCTGTGAGGAATTTATCAAGGTCATGGACAACCTGAACTTGCCCA  
 AGCCACAGCAGATAGACATTGCTGTTCCCTGCAAATATGCCTGTGGGGTCCAGACTCCACCTCCTGATT  
 CGTCCCAGCCAGCTGCTCACATCCGTTATGAATGCACTAGGAGGGGTGAGGGGAGGGGTGTACCCCAAGG  
 GCCTCTCTCTTCTCCTACCTCTACTCTCACCAGCTACTTGAGCTTCTTAAATAAAGTTTACTTCTGTTTT  
 GCCACGAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** RsrII-NotI

**ACCN:** NM\_023154

**Insert Size:** 765 bp

**OTI Disclaimer:** 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).



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<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>	<a href="#">BC083162</a> , <a href="#">AAH83162</a>
<b>RefSeq Size:</b>	936 bp
<b>RefSeq ORF:</b>	765 bp
<b>Locus ID:</b>	66071
<b>UniProt ID:</b>	<a href="#">Q9DCM0</a>
<b>Cytogenetics:</b>	7 A3
<b>Gene Summary:</b>	First described as a protein that can shuttle between the nucleus and the cytoplasm and suppress p53-induced apoptosis by sequestering the transcription factor RELA/NFKB3 in the cytoplasm and preventing its accumulation in the nucleus (By similarity). Sulfur dioxygenase that plays an essential role in hydrogen sulfide catabolism in the mitochondrial matrix. Hydrogen sulfide (H <sub>2</sub> S) is first oxidized by SQRDL, giving rise to cysteine persulfide residues. ETHE1 consumes molecular oxygen to catalyze the oxidation of the persulfide, once it has been transferred to a thiophilic acceptor, such as glutathione (R-SSH). Plays an important role in metabolic homeostasis in mitochondria by metabolizing hydrogen sulfide and preventing the accumulation of supraphysiological H <sub>2</sub> S levels that have toxic effects, due to the inhibition of cytochrome c oxidase.[UniProtKB/Swiss-Prot Function]