

## Product datasheet for MC224355

### Drosha (NM\_001130149) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Drosha (NM_001130149) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Drosha
Synonyms:	1110013A17Rik; AI874853; Etohi2; Rn3; Rnasen
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224355 representing NM_001130149 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAAGGCAATACGTGTCATAGAATGTCGTACCACCCAGGACGAGGGTGTCCCCGGGGCCGAGGAGGAC  
ACGGAGCCAGACCTTCAGCACCAGCTTTACAGCCCAAAACCTGCGACTTCTTATCCCCAGCAGCCGCC  
TGCGCAGTATCAATATGAGCCTCCGAGCGCCCCCTTCTCTCTACTCGAACTCTCAGGCCCCAGCTTT  
ATGCCCCACGGCCAGACTTTGTCCCTACCCTCCCCAGCGGCCGTCTGCCAAGGGCTCTCCCTC  
CCTGCCAGTGAGGCCGCTTACCCCAACCACCAGATGAGACACCCTTCCCGGTGCCTCCCTGTTTTCC  
ACCCATGCCCCCTCCGATGCCTTGCCCAATAACCCGCCTGCCTCCGGAGCACCTCCCGACAAGGCACT  
TCCCCCTTCATGGTGCCCCCTCCTTCCATGCCCAACCCTCCGCCCCCGCCGTATGCCGACGAGGTTA  
ATTACAGTACCCCCCTGGGTACTCGCACAGCTTCCCACCGCCGGCTTCAACAGTTACCAGAACAACCTC  
CAGCTCTTTCCACCCAGTGCTAACAGCAGCAGCACTCCTCATTTTCGACACCTCCCACCACTACTCACTC  
CCAAAGGCTCAGAATGAGAGCGGTCCCCAGAAAGGCTCAAGCACTACGACGACCACAGGCCAGGATC  
ACAGTCACGGGCGAGGCGAGAGGCATCGGTCCCTGGAGCGCAGGGAGCGCGGCCGAGCCCTGAAAGGAG  
AAGACCTGAGAGCCGCTACCGCTCAGACTATGATCGGGGGAGAACGCCACCGCTCGCCACCGCAGCTAT  
GAAAGGAGCAGAGAGCGGGATCGAGAGACACAGGCACCGGGAGGCCCGCAGATCACCGTCTTAGAAA  
GGTCTACAAGAAAGAGTATAAGAGATCTGGAAGGAGTTACGCTTTACCAGTTGCTCCTGAGCCCGCTGG  
GTGCACACCAGAGTTGCCTGGGGAGATGATTAATAACTACAGAGTCTTGGGCCCGCCCCGGAGAATGTG  
AATCATCGTTCTCCAAGCAGGGAGAAGAAGAGAGCTCGTTGGGAGGAGAAAAAGACAGATGGAGCGACA  
GCCAGGGCTCTGGCAAAGAGAAGAACTACAGTCCATCAAAGAGAAAGAGGCAGAGGAGGTGCCTCCAGA  
GAAGACGGAGGAGGAGGAAGAGCTCCTTAAGCCTGTGTGGATTTCGCTGTACACATTCGGAAAGCTAT  
TACTCCAGTGACCAATGGATCAGGTGGGAGACTCGACTGTCGTAGGGACAAGCAGGCTCCGTGATTTGT  
ATGACAAATTTGAGGAAGAATTGGGGAATAGGCAAGAGAAGGCCAAAGCTGCCCGCCCTCCGTGGGAGCC  
TCCGAAGACAAAGCTGGATGAAGATTTAGAGAGTTCAGTGAGTCTGAATGTGAGACTGACGACGACAGC



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ACCTGTTGAGCAGCTCGGACTCGGAGGTGTTGATGTCATTGCAGAGATTAACGCAAAAAGGCTCACC  
 CTGACCGGCTTCATGATGAACTCTGGTACAACGACCCAGGCCAGATGAACGATGGACCGCTTTGCAAATG  
 CAGTGCAAAAGCCAGACGCACAGGAATCCGCCACAGCATTTATCCCGGAGAAGAGGCAATCAAGCCCTGC  
 CGTCCGATGACCAACAACGCTGGCCGGCTTTTCCACTATCGGATCACCGTCTCCCCGCTACCAACTTCT  
 TAACTGACAGGCCAACAGTCATAGAATATGATGACCACGAGTATATTTTTGAAGGATTTCTATGTTTG  
 ACATGCTCCTCTGACCAATATCCACTGTGTAAGTGATTGATTCAACATAGACTACACGATTCATTTT  
 ATCGAAGAGATGATGCCTGAGAATTTTTGTGTGAAAGGACTTGAAGTGTTCATTTCTTCTATTCCAGAG  
 ATATTTTGAATTATATGACTGGAATCTTAAAGGTCCTTTGTTTGAAGACAGCCCTCCCTGCTGCCGAG  
 ATTTTCATTTGATGCCACGTTTTGTAAGATTTCTCCAGATGGAGGCAAAAGAGTGTATCCATGCACCAG  
 ATCCTTCTCTACCTGCTGCGCTGCAGCAAGGCTCTGGTGCAGGAGGAGATTGCCAATGCTCCAGT  
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 ACCGAGCTCTGTCCGATTGATCAGCTGGATCGTGAACAGTTCACCCCGAAGTATCCTTTCCGATT  
 ATCGTTCACTTTGGGATCCGCCCCGACAGTTGAGTTATGCAGGAGACCCACAGTATCAGAAATTATGGA  
 AAAGCTATGTGAACTTCGCCACCTCTAGCAAACAGTCCCAAAGTCAAACAACGACAAGCAGAAGCT  
 GGCTCAGAGGGAGGAAGCCTCCAGAAAATACGCAGAGAAGACAGATGCGGCGAGAAGTACCGTGGAG  
 CTGAGTAGCCAAGGATTCTGAAAACCTGGCATTGTTCTGATGTCTGTCAGCATGCAATGATGCTGCCTG  
 TTCTGACCATCACATCCGGTACCATCAATGCTTAATGCACCTGGACAAGTTGATAGGATATACTTTCCA  
 AGACCGTGTCTGCTCCAGCTTGCCATGACTCATCCGAGTCAACATTTAAATTTTGGAAATGAATCCTGAC  
 CATGCCAGGAATCTTTGTCTAACTGTGGAATTCGACAACCCAAATATGGAGACAGAAAAGTTTCATCACA  
 TGCACATGCGGAAAAAGGAATTAATACCTAATAAATATCATGTACGCCTTGGCCAAGATGATCCAAC  
 TCCTTCAAGGATTAATCACAACGAAAGTTGGAGTTCCTGGGGATGCTGTTGTTGAGTTCTGACCAGT  
 GTCCACCTGTACTACCTGTTTCTAGCTTGGAGGAAGGGGCTTGGCGACCTATCGGACCGCCATTGTTT  
 AGAATCAGCACCTCGCCATGCTTGCAAAGAACTTGAAGTGGATCGATTTATGCTATATGCCCCAGGGCC  
 CGACCTATGTAGAGAATCAGATCTCCGCCATGCGATGGCCAATTGTTTTGAAGCCTTGATAGGAGCTGTT  
 TACTTGGAGGGGAGCCTAGAGGAAGCCAAACAGTTATTTGGACGCTTACTCTTAAATGATCCGGACCTTC  
 GAGAAGTCTGGCTCAATTATCCTCTCCACCCTCCAACATAAGAGCCAAATACGGATCGGCAACTTAT  
 TGAAAACCTCCCCAGTTCTACAGAACTTACGGAGTTTGAAGAAGCAATTGGAGTATCTTCACTCACGTC  
 CGGCTTCTGGCGAGGGCTTACACTGAGAACCGTGGGCTTTAACACCTGACCTAGGCCACAATCAGA  
 GGATGGAATTTCTGGGCGACTCCATAATGCAGCTGGTGGCCACAGAGTACTTGTTCATTTCCCGGA  
 CCATCACGAAGGACACTGACGTTGTTACGAAGTTCCTTAGTGAACAACAGAACGAAGCAAGGTAGCA  
 GAGGAAGTGGGCATGCAGGAGTATGCCATCACCACGACAAAACCAAGAGACCCGTGGCCCTAAGAACCA  
 AGACTTTGGCAGACCTTTTGAATCATTATCGCAGCGCTGTACATCGACAAGGACTGGAATATGTCCA  
 CACTTTCATGAACGCTGCTTCTTTCCCGGCTGAAGGAGTTCATTCTGAATCAGGATTGGAACGACCCC  
 AAGTCGCAGCTGCAGCAGTGTGCTGACCCCTGAGGACAGAAGGGAAAGAGCCTGACATCCCCTTATACA  
 AGACTCTGCAGACAGTGGGGCCATCCCATGCTAGAACCTACACTGTGGCTGTTTATTTCAAGGGAGAAA  
 GATAGGCTGTGGGAAAGGACCAAGCATTGAGCAGGCGGAGATGGGAGCAGCAATGGATGCACTGGAGAAA  
 TATAACTTTCCCAGATGGCCATCAGAAGCGGTTTATTGAGCGGAAATACAGACAAGAGTTAAAGGAAA  
 TGAGGTGGGAAAGAGAGCATCAGGAGAGAGACCGGAGGAGGCTGAAGACATCAAGAAGTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001130149

**Insert Size:** 4122 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).

<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>NM_001130149.1, NP_001123621.1</u>
<b>RefSeq Size:</b>	4584 bp
<b>RefSeq ORF:</b>	4122 bp
<b>Locus ID:</b>	14000
<b>UniProt ID:</b>	<u>Q5HZJ0</u>
<b>Cytogenetics:</b>	15 A1
<b>Gene Summary:</b>	<p>Ribonuclease III double-stranded (ds) RNA-specific endoribonuclease that is involved in the initial step of microRNA (miRNA) biogenesis. Component of the microprocessor complex that is required to process primary miRNA transcripts (pri-miRNAs) to release precursor miRNA (pre-miRNA) in the nucleus. Within the microprocessor complex, DROSHA cleaves the 3' and 5' strands of a stem-loop in pri-miRNAs (processing center 11 bp from the dsRNA-ssRNA junction) to release hairpin-shaped pre-miRNAs that are subsequently cut by the cytoplasmic DICER to generate mature miRNAs. Involved also in pre-rRNA processing. Cleaves double-strand RNA and does not cleave single-strand RNA. Involved in the formation of GW bodies. [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) represents the longer transcript. Both variants 1 and 2 encode the same protein.</p>