

Product datasheet for **RG223021**

CES2 (NM_198061) Human Tagged ORF Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | CES2 (NM_198061) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | CES2 |
| Synonyms: | CE-2; CES2A1; iCE; PCE-2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG223021 representing NM_198061
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTGCTCAGTCCCGCTCCTACCACACCCACCTTCCCGGCCAAGCCAGCGCACCCCGCTGACTC
 CCTGCCCAGTCCAACTCCAAGGCTGGCAAGGCACTGATCCACTGCTGGACAGACCCGGGGCAGCCTCT
 GGGTGAACAGCAGCGTGTCCGCCGCGAGCAACCGAGACCAGCGAGCCGACCATGCGGCTGCACAGACTT
 CGTGCGCGGCTGAGCGCGGTGGCCTGTGGGCTTCTGCTGCTTCTGTCCGGGGCCAGGGCCAGGACTCAG
 CCAGTCCCATCCGGACCACACACGGGGCAGGTGCTGGGGAGTCTTGTCCATGTGAAGGGCCCAATGC
 CGGGGTCCAAACCTTCTGGGAATTCATTTGCCAAGCCACCTCTAGGTCGCTGCGATTTGACCCCTT
 GAGCCCTTGAATCTTGGAGTGGTGTGAGGGATGGAACCCCATCCGGCCATGTGTCTACAGGACCTCA
 CCGCAGTGGAGTCAGAGTTTCTAGCCAGTTCAACATGACCTTCCCTCCGACTCCATGTCTGAGGACTG
 CCTGTACCTCAGCATCTACACGCGGCCATAGCCATGAAGGCTCTAACCTGCCGGTGTGTTGGATC
 CACGGTGGTGCCTTGTGTTTGGCATGGCTTCTTGTATGATGGTCCATGCTGGCTGCCTTGGAGAACG
 TGGTGGTGGTCATCATCCAGTACCGCTGGGTGTCTGGGCTTCTCAGCACTGGAGACAAGCACGCAAC
 CGGCAACTGGGGCTACCTGGACCAAGTGGCTGCACTACGCTGGGTCCAGCAGAATATCGCCCACTTGGG
 GGCAACCTGACCGTGTACCATTTTTGGCGAGTCTGCGGGTGGCAGAGTGTGTCTTCCGCTTGTGTGT
 CCCCCATATCCAAGGACTCTCCACGGAGCCATCATGGAGAGTGGCGTGGCCCTCTGCCCGCCCTCAT
 TGCCAGCTCAGCTGATGTATCTCCACGGTGGTGGCAACCTGTCTGCCTGTGACCAAGTTGACTCTGAG
 GCCCTGGTGGGCTGCCTGCGGGGCAAGAGTAAAGAGGAGATTCTTGAATTAACAAGCCTTTCAAGATGA
 TCCCGGAGTGGTGGATGGGGTCTTCTGCCAGGCACCCAGGAGCTGCTGGCCTTCCGCGACTTTCA
 GCCTGTCCCTAGCATTGTTGGTGTCAACAACAATGAATTCGGCTGGCTCATCCCCAAGGTATGAGGAT
 TATGATACCCAGAAAGAAATGGACAGAGAGGCCTCCAGGCTGCTCTGCAGAAAATGTTAACGCTGCTGA
 TGTTCCTCTACATTTGGTACCTGCTGAGGGAGGAGTACATTGGGGACAATGGGGATCCCCAGACCTT
 CCAAGCGCAGTTCAGGAGATGATGGCGGACTCCATGTTTGTGATCCCTGCACTCCAAGTAGCACATTTT
 CAGTGTTCGGGGCCCTGTGTACTTCTACGAGTTCAGCATCAGCCAGCTGGCTCAAGAACATCAGGC
 CACCGCATGAAGGCAGACCATGTTAAATTCAGTGAAGAGGAGCAGCTAAGCAGGAAGATGATGAA
 GTACTGGGCAACTTTGCGAGAAATGGGAACCCCAATGGCGAGGGTCTGCCACACTGGCCGCTGTTGAC
 CAGGAGGAGCAATACCTGCAGCTGAACCTACAGCTGCGGTGGCCGGGCTCTGAAGGCCACAGGCTCC
 AGTTCTGGAAGAAGCGCTGCCCAAAAGATCCAGGAGCTCGAGGAGCCTGAAGAGAGACACACAGAGCT
 G

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG223021 representing NM_198061
 Red=Cloning site Green=Tags(s)

MTAQRSPTTPTFPGPSQRTPLTPCPVQTPRLGKALIHCWTDPGQPLGEQQRVRRRTETSEPTMRLHRL
 RARLSAVACGLLLLLVRGQGQDSASPIRTHHTGQVLGSLVHVKGANAGVQTFGLGIPFAKPLGPLRFAPP
 EPPEWSVGRDGTTHPAMCLQDLTAVESEFLSQFNMTFPSDSMSDECLYLSIYTPAHSHEGSNLPVMVWI
 HGGALVFGMASLYDGSMLAALENVVVVVIQYRLGVLGFFSTGDKHATGNWGYLDQVAALRWVQQAIAHFG
 GNPDRVTIFGESAGGTSVSSLVSPISQGLFHGAIMESGVALLPGLIASSADVISTVVANLSACDQVDSE
 ALVGCLRKSKKEILAINKPFKMIIPGVVDGVFLPRHPQELLASADFQPVPSIVGVNNEFGWLIPKVMRI
 YDTQKEMDREASQAALQKMLTLLMLPPTFGDLLREEYIGDNGDPQTLQAQFQEMMADSMFVIPALQVAHF
 QCSRAPVYFYEFQHQPSWLKNIRPPHMKADHVKFTEEEELSRKMMKYWANFARNGNPNGEGLPHWPLFD
 QEEQYLQLNLQPAVGRALKAHRLQFWKKALPQKIQELEEPEERHTEL

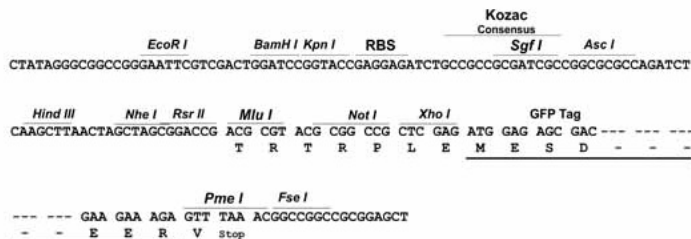
TRTRPLE – GFP Tag – V

Restriction Sites:

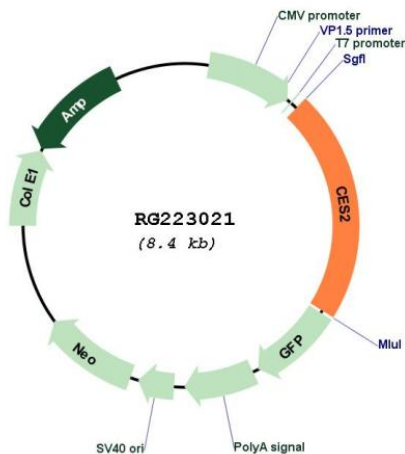
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_198061
 ORF Size: 1821 bp

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| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info |
| OTI Annotation: | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| Components: | 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). |
| Reconstitution Method: | <ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.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. |
| RefSeq: | NM_198061.2 , NP_932327.1 |
| RefSeq Size: | 3909 bp |
| RefSeq ORF: | 1632 bp |
| Locus ID: | 8824 |
| UniProt ID: | O00748 |
| Cytogenetics: | 16q22.1 |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Drug metabolism - other enzymes |
| Gene Summary: | This gene encodes a member of the carboxylesterase large family. The family members are responsible for the hydrolysis or transesterification of various xenobiotics, such as cocaine and heroin, and endogenous substrates with ester, thioester, or amide bonds. They may participate in fatty acyl and cholesterol ester metabolism, and may play a role in the blood-brain barrier system. The protein encoded by this gene is the major intestinal enzyme and functions in intestine drug clearance. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Oct 2010] |