

Product datasheet for **SC112863**

E2 230K (UBE2O) (NM_022066) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	E2 230K (UBE2O) (NM_022066) Human Untagged Clone
Tag:	Tag Free
Symbol:	UBE2O
Synonyms:	E2-230K
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_022066, the custom clone sequence may differ by one or more nucleotides

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ATGGCGGATCCCGCAGCCCCACGCCCGCAGCTCCCGCTCCAGCCCAGGCCCGGCTCCAGCCCCGGAGG
CAGTCCCGGCCCCAGCCGAGCCCCGTCCCGCGCCGGCCCGCCCTCGGACTCGGCTCCGGGCCGTC
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AGGGCCCGGGGAGCTCGGGGTGCTCCGAGGCCGGGGCGGGCCACGAGGAGGGCCGGCCAGCCCCCT
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CAACAGCAAGGACCTGCAGCACATCTGGCCCTTATGTATGGGGACTACATTGCCTATGACTGCTGGCTG
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GATGGCTCCGTGGAATGCAACATCCGCTCCAACGACCTCTCCCTGTGCACCACCTGGACAACAACGAGT
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GCATGCCGGAGTGACAGAGGACAAGTAG

**5' Read Nucleotide
Sequence:**

>OriGene 5' read for NM_022066 unedited
GACTCACTATAGGCGCCGCGNAATTTCGACAGGCCCCACTTCTCCANAGCGGCAGCG
GCACGAGTCGAAAAAGACATCCCCTTGTCCATCAAGAACTTAAAGCGCAAAACACAAGAG
GAAGAAGAATAAAATCACTCGAGACTTCAAGCCAGGGGACAGGGTGGCAGTGGAGGTGGT
GACCACGATGACCTCAGCCGACGTGATGTGGCAGGATGGCTCCGTGGAATGCAACATCCG
CTCCAACGACCTTCTCCCTGTGCACCACCTGGACAACAACGAGTTCTGCCCTGGAGACTT
CGTGGTAGATAAGCGAGTCCAGAGCTGTCCAGACCCTGTGTCTACGGTGTGGTACAGTC
TGGGGACCACATCGGCCGTACCTGCATGGTGAAGTGGTTCAAGCTGAGGCCGAGTGGGGA
CGACGTGGAGCTGATTGGAGAAGAGGAAGATGTGAGTGTTCACGACATTGCTGACCACCC
TGACTTTAGGTTCCGTACAACCTGACATCGTCATCCGCATCGGCAATACTGAGGATGGGGC
TCCTACAAGGAGGATGAGCCATCGGTGGGCCAGGTGGCCCGTGTGGACGTCAGCANCAA
GGTGGAGGTGGTGTGGGCTGACAACCTCAAAGACCATCATCCTGCCCCAGCACTTGTACAA
CATAGACTCTGAGATTGAGGAGTCAGACTACGATTTCGGTAGAAGGCAGCACCCAGCGGGGC
ATCCTCGGATGAATGGGAAGATGATAGTGACAGCTGGGAGACGGACAATGGGCTGGTGG
GGACGAGCACCCAGGATAGAGAGCCCCCATCCCACCCTGGAGCAGCCGGTGGCCCT
GGAGACANGNAGTGTGATCANTGAAGAGGCACCACAGCTGCCGTNACAGGGGGTGTGG
CCATGGCTGCCCATGGNCGNCTGATGAANAAGGCTGCAGGACCGGC

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_022066 unedited NNNTTTATAGCTATGNACCCGCGCCGCATNCTAGGATCGAGTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTTTTGCAAGTAAAAAATTTAATCACACAGCACTTTATACAGATATCG TAAGCAGTAGGCATTACATCTCCACATGTACAATGCACTGGGAAGCACAGCCCCACCAG TCACTCCGGGTGTTTCTCAAACAAGATACCGACTCGGTTCCAAATGCCACGGGGTGTGGT CGGGCTCCATCCTCCCGCAGCTCTGCTGGCTGGCGGTACAGCACAGCAGGTGTGGA GCCCACTTAAGGCTGACAAGACGCATCATGCTTTGGCTTTTTTTTTTTGGCTTTTTTTCTAA TAAGAGTTAATATCTTTGCTTTTGAGTTTTTTTTTCCAACCTTAAATATTACATACATACC CCAAAAATTACATAGCTGCAATGTGCTCAACAGCATCCTCTCGGCCTGGAGCTTACATT ATCAAAAGCTTAAAAAATTGGAACCTCTGGGCCTGTCTCTGGGCACCTAGGAGAGCCC CCGCCGGGCCGTCCTTTGGATTGAGCCTGCAGTTTGTAAACGAAAGGCTGACAGTANGC CTTCTAGTCCAAGAGAGGGCTGGCTCGCTTGGAGGTCACTGAGCTGCACGCCTGTCCCAG TGTGACCATGTAGGGGGGAGGGGGGCCCTAACACTGGCCTTGGCCTTGNCGAGCTGCT CTTGCCCCAGCAGCCTTCGACAGAAGAGCAAGGCACTATTAGCTGTTGCTTTCCCTGCA GCTCCNTGGGCCTCAACCCATGGGCATGGGGGAAGCCACACCTCTCCTGGGCGTCACC CGGACCTAGCCTGGTCCAACTTCTAGNAGCAGTTACCAGCCTGGAGCTATTAACCG GGCCACAGGCCTGTATCCCCGGGATTATTGACGCAGCTACACTCAAAGG
Restriction Sites:	NotI-NotI
ACCN:	NM_022066
Insert Size:	3870 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).
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_022066.1 , NP_071349.1
RefSeq Size:	5395 bp
RefSeq ORF:	2229 bp
Locus ID:	63893
UniProt ID:	Q9C0C9
Cytogenetics:	17q25.1
Domains:	UBCc
Protein Pathways:	Ubiquitin mediated proteolysis

Gene Summary:

E2/E3 hybrid ubiquitin-protein ligase that displays both E2 and E3 ligase activities and mediates monoubiquitination of target proteins (PubMed:23455153, PubMed:24703950). Negatively regulates TRAF6-mediated NF-kappa-B activation independently of its E2 activity (PubMed:23381138). Acts as a positive regulator of BMP7 signaling by mediating monoubiquitination of SMAD6, thereby regulating adipogenesis (PubMed:23455153). Mediates monoubiquitination at different sites of the nuclear localization signal (NLS) of BAP1, leading to cytoplasmic retention of BAP1. Also able to monoubiquitinate the NLS of other chromatin-associated proteins, such as INO80 and CXXC1, affecting their subcellular location (PubMed:24703950). Acts as a regulator of retrograde transport by assisting the TRIM27:MAGEL2 E3 ubiquitin ligase complex to mediate 'Lys-63'-linked ubiquitination of WASHC1, leading to promote endosomal F-actin assembly (PubMed:23452853).
[UniProtKB/Swiss-Prot Function]