

Product datasheet for SC334718

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UBXN1 (NM_001286078) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: UBXN1 (NM_001286078) Human Untagged Clone

Tag: Tag Free Symbol: UBXN1

Synonyms: 2B28; SAKS1; UBXD10

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001286078, the custom clone sequence may differ by one or

more nucleotides

ATGGCGGAGCTGACGGCTCTTGAGAGTCTCATCGAGATGGGCTTCCCCAGGGGACGCGCGGAGAAGGCTC
TGGCCCTCACAGGGAACCAGGGCATCGAGGCTGCGATGGACTGGTGTGGCCCAGAAGCA
GCGGGAGCGTGAAGAAAGAAGAGAACGGGAGCGCTGCGATGGACCGGGAACGCAGCAGCAGCAGAGCAA
GAGTTGTCAGCAGCACCACGACAGCGGCTACAGGAAGATGAGATGCGCCGGGCTGCTGAGGAGAGGAGAGGC
AAAAGGCCGAGGAGTTAGCAGCCAGACAAAGAGTTAGAGAAAAGATCGAGAGGGACAAAGCAGAGAGC
CAAGAAGTATGGTGGCAGTGTGGGCTCTCAGCCACCCCCAGTGGCACCAGAGCCAGGTCCTGTTCCCTCT
TCTCCCAGCCAGGAGCCTCCCACCAAGCGGGAACAAGCTGTCGCATACAGGTCAGGCTGCCAGATG
GGACCTCACTGACCCAGACGTTCCGGGCCCGGGAACAGCTGGCAGCTGTAGGCTCCATCTCCCCACCAGAGGGCCCTCCACCAGACGGGCCTCCCACCAGACGGGCCTTCTCCCCAGACGGGCCTTC
TCAGAAGCTGACATGGAGCGGCCCTCTGCAGGAGCTGGGACTCCTGTTCCCCAGACGGGCCTTC
TCAGAAGCTGACATGGAGCGCCTCTGCAGGAGCTGGGACTCCTGTTCTCATTGTGGCCA
AGAAATGTCCCAGCTGA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001286078

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:

- 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: <u>NM 001286078.1</u>, <u>NP 001273007.1</u>

RefSeq Size: 1013 bp
RefSeq ORF: 717 bp
Locus ID: 51035
UniProt ID: Q04323
Cytogenetics: 11q12.3

Protein Families: Druggable Genome

Gene Summary: Ubiquitin-binding protein that plays a role in the modulation of innate immune response.

Blocks both the RIG-I-like receptors (RLR) and NF-kappa-B pathways. Following viral infection, UBXN1 is induced and recruited to the RLR component MAVS. In turn, interferes with MAVS oligomerization, and disrupts the MAVS/TRAF3/TRAF6 signalosome. This function probably serves as a brake to prevent excessive RLR signaling (PubMed:23545497). Interferes with the TNFalpha-triggered NF-kappa-B pathway by interacting with cellular inhibitors of apoptosis proteins (clAPs) and thereby inhibiting their recruitment to TNFR1 (PubMed:25681446). Prevents also the activation of NF-kappa-B by associating with CUL1 and thus inhibiting NF-kappa-B inhibitor alpha/NFKBIA degradation that remains bound to NF-kappa-B

(PubMed:28152074). Interacts with the BRCA1-BARD1 heterodimer and regulates its activity. Specifically binds 'Lys-6'-linked polyubiquitin chains. Interaction with autoubiquitinated BRCA1 leads to the inhibition of the E3 ubiquitin protein ligase activity of the BPCA1 BARD1

leads to the inhibition of the E3 ubiquitin-protein ligase activity of the BRCA1-BARD1 heterodimer (PubMed:20351172). Component of a complex required to couple deglycosylation and proteasome-mediated degradation of misfolded proteins in the endoplasmic reticulum that are retrotranslocated in the cytosol.[UniProtKB/Swiss-Prot

Function]

Transcript Variant: This variant (3) lacks two alternate in-frame exons in the 5' region and contains an alternate exon structure in the 3' region, compared to variant 1. The encoded isoform (3) has a distinct C-terminus and is shorter than isoform 1.