OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC110144

TCIRG1 (NM_006053) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TCIRG1 (NM_006053) Human Untagged Clone
Tag:	Tag Free
Symbol:	TCIRG1
Synonyms:	a3; Atp6i; ATP6N1C; ATP6V0A3; OC-116kDa; OC116; OPTB1; Stv1; TIRC7; Vph1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene sequence for NM_006053 edited
GAATTCGGCACGAGGGACGGAGCGCCTGGCCCAGGAGCTGCGGGATGTGCGGGGCAACCA
GCAGGCCCTGCGGGCCCAGCTGCACCAGCTGCAGCTCCACGCCGCCGTGCTACGCCAGGG
CCATGAACCTCAGCTGGCAGCCGCCCACACAGATGGGGCCTCAGAGAGGACGCCCCTGCT
CCAGGCCCCCGGGGGGCCGCACCAGGACCTGAGGGTCAACTTTGTGGCAGGTGCCGTGGA
GCCCCACAAGGCCCCTGCCCTAGAGCGCCTGCTCTGGAGGGCCTGCCGCGGCTTCCTCAT
TGCCAGCTTCAGGGAGCTGGAGCAGCCGCTGGAGCACCCCGTGACGGGCGAGCCAGCCAC
GTGGATGACCTTCCTCATCTCCTACTGGGGTGAGCAGATCGGACAGAAGATCCGCAAGAT
CACGGACTGCTTCCACTGCCACGTCTTCCCGTTTCTGCAGCAGGAGGAGGCCCGCCTCGG
GGCCCTGCAGCAGCTGCAACAGCAGAGCCAGGAGCTGCAGGAGGTCCTCGGGGAGACAGA
GCGGTTCCTGAGCCAGGTGCTAGGCCGGGTGCTGCAGCTGCTGCCGCCAGGGCAGGTGCA
GGTCCACAAGATGAAGGCCGTGTACCTGGCCCTGAACCAGTGCAGCGTGAGCACCACGCA
CAAGTGCCTCATTGCCGAGGCCTGGTGCTCTGTGCGAGACCTGCCCGCCCTGCAGGAGGC
CCTGCGGGACAGCTCGATGGAGGAGGGAGTGAGTGCCGTGGCTCACCGCATCCCCTGCCG
GGACATGCCCCCCACACTCATCCGCACCAACCGCTTCACGGCCAGCTTCCAGGGCATCGT
GGATGCCTACGGCGTGGGCCGCTACCAGGAGGTCAACCCCGCTCCCTACACCATCATCAC
CTTCCCCTTCCTGTTTGCTGTGATGTTCGGGGATGTGGGCCACGGGCTGCTCATGTTCCT
CTTCGCCCTGGCCATGGTCCTTGCGGAGAACCGACCGGCTGTGAAGGCCGCGCAGAACGA
GATCTGGCAGACTTTCTTCAGGGGCCGCTACCTGCTCCTGCTTATGGGCCTGTTCTCCAT
CTACACCGGCTTCATCTACAACGAGTGCTTCAGTCGCGCCACCAGCATCTTCCCCTCGGG
CTGGAGTGTGGCCGCCATGGCCAACCAGTCTGGCTGGAGTGATGCATTCCTGGCCCAGCA
CACGATGCTTACCCTGGATCCCAACGTCACCGGTGTCTTCCTGGGACCCTACCCCTTTGG
CATCGATCCTATTTGGAGCCTGGCTGCCAACCACTTGAGCTTCCTCAACTCCTTCAAGAT
GAAGATGTCCGTCATCCTGGGCGTCGTGCACATGGCCTTTGGGGTGGTCCTCGGAGTCTT
CAACCACGTGCACTTTGGCCAGAGGCACCGGCTGCTGCTGGAGACGCTGCCGGAGCTCAC
CTTCCTGCTGGGACTCTTCGGTTACCTCGTGTTCCTAGTCATCTACAAGTGGCTGTGTGT
CTGGGCTGCCAGGGCCGCCTCGGCCCCCAGCATCCTCATCCACTTCATCAACATGTTCCT
CTTCTCCCACAGCCCCAGCAACAGGCTGCTCTACCCCCGGCAGGAGGTGGTCCAGGCCAC
GCTGGTGGTCCTGGCCTTGGCCATGGTGCCCATCCTGCTGCTTGGCACACCCCTGCACCT
GCTGCACCGCCACCGCCGCCGCCTGCGGAGGAGGCCCGCTGACCGACAGGAGGAAAACAA
GGCCGGGTTGCTGGACCTGCCTGACGCATCTGTGAATGGCTGGAGCTCCGATGAGGAAAA
GGCAGGGGGCCTGGATGATGAAGAGGAGGCCGAGCTCGTCCCCTCCGAGGTGCTCATGCA
CCAGGCCATCCACACCATCGAGTTCTGCCTGGGCTGCGTCTCCAACACCGCCTCCTACCT
GCGCCTGTGGGCCCTGAGCCTGGCCCACGCCCAGCTGTCCGAGGTTCTGTGGGCCATGGT
GATGCGCATAGGCCTGGGCCTGGGCCGGGAGGTGGGCGTGGCGGCTGTGGTGCTGGTCCC
CATCTTTGCCGCCTTTGCCGTGATGACCGTGGCTATCCTGCTGGTGATGGAGGGACTCTC
AGCCTTCCTGCACGCCCTGCGGCTGCACTGGGTGGAATTCCAGAACAAGTTCTACTCAGG
CACGGGCTACAAGCTGAGTCCCTTCACCTTCGCTGCCACAGATGACTAGGGCCCACTGCA
GGTCCTGCCAGACCTCCTTCCTGACCTCTGAGGCAGGAGAGGAATAAAGACGGTCCGCCC
TGGCAGTGXXXXXXXXXXXXXXXXXXXXXXXXAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACTCGAC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006053 unedited
GTTCAAATTTGTATACGACTCATATAGGCGGCCGCGNAATCGGCACGAGGGACGGAGCGC
CTGGCCCAGNAGCTGCGGGATGTGCGGGGCAACCAGCAGGCCCTGCGGGCCCAGCTGCAC
CAGCTGCAGCTCCACGCCGCCGTGCTACGCCAGGGCCATGAACCTCAGCTGGCAGCCGCC
CACACAGATGGGGCCTCAGAGAGGACGCCCCTGCTCCAGGCCCCCGGGGGGCCGCACCAG
GACCTGAGGGTCAACTTTGTGGCAGGTGCCGTGGAGCCCCACAAGGCCCCTGCCCTAGAG
CGCCTGCTCTGGAGGGCCTGCCGCGGCTTCCTCATTGCCAGCTTCAGGGAGCTGGAGCAG
CCGCTGGAGCACCCCGTGACGGGCGAGCCAGCCACGTGGATGACCTTCCTCATCTCCTAC
TGGGGTGAGCAGATCGGACAGAAGATCCGCAAGATCACGGACTGCTTCCACTGCCACGTC
TTCCCGTTTCTGCAGCAGGAGGAGGCCCGCCTCGGGGCCCTGCAGCAGCTGCAACAGCAG
AGCCAGGAGCTGCAGGAGGTCCTCGGGGAGACAGAGCGGTTCCTGAGCCAGGTGCTAGGC
CGGGTGCTGCAGCTGCTGCCGCCAGGGCAGGTGCAGGTCCACAAGATGAAGGCCGTGTAC
CTGGCCCTGAACCAGTGCAGCGTGAGCACCACGCACAAGTGCCTCATTGCCGAGGCCTGG
TGCTCTGTGCGAGACCTGCCCGCCCTGCAGGAGGCCCTGCGGGACAGCTCGATGGAGGAG
GGAGTGAGTGCCGTGGCTCACCGCATCCCCTGCCGGGACATGCCCNCCACACTCATCCGC
ACCAACCGCTTCACGGNCAGCTTCCCAGGCATCGTGGATGCCTACGGCGTGGGCCGCTAC
CAGAAGGTCAACCCCGCTTCCTACACCAT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006053 unedited
TGGGACGGACCGCCTTTTTTCCTCTCCTGCCTCANAGTCAGGNAAGAGGTCTGGCAGGAC
CTGCAGTGGGCCCTAGTCATCTGTGGCAGCGAAGGTGAAGGGACTCAGCTTGTAGCCCGT
GCCTGAGTAGAACTTGTTCTGGAATTCCACCCAGTGCAGCCGCAGGGCGTGCAGGAAGGC
TGAGAGTCCCTCCATCACCAGCAGGATAGCCACGGTCATCACGGCAAAGGCGGCAAAGAT
GGGGACCAGCACCACAGCCGCCACGCCCACCTCCCGGCCCAGGCCCAGGCCTATGCGCAT
CACCATGGCCCACAGAACCTCGGACAGCTGGGCGTGGGCCAGGCTCAGGGCCCACAGGCG
CAGGTAGGAGGCGGTGTTGGAGACGCAGCCCAGGCAGAACTCGATGGTGTGGATGGCCTG
GTGCATGAGCACCTTGGAGGGGACGAGCTCGGCCTCCTCTTCATCATCCAGGCCCCCTGC
CTTTTCCTCATCGGAGCTNCAGCCATTCACAGATGCGTCAGGCAGGTCCAGCAACCCGGC
CTTGTTTTCCTCCTGTCGGTCAGCGGGCCTCCTCCGCATGCGGNGGCGGTGGCGGTGCAC
CATGTGCACGGGTGTGCCAAGCAGCATGATGGGCACCATGGCCAAGGCCAGAACCACCAG
CGTGGCCTGGGACACCTCCTGCCCGGGGTTGAGNANCCTGTTGCTGGGGCTGCGGGAGAA
GAGGACATGTCTGTGAATTGGATGGAGATGCTTGGGGCCGAGGCGGCCCTGNNACCCACC
ACCCCCTGCACCTTGGTTAGACTAGAACACAGCAGTAACCTAAGATTCCCACAAGGAAGG
CATGCTTCTGTATGTTTCCTATCACTCCCCGTGCCTTTGGGTCAATGGAACTTGGTTNAN
ACCTCCTGGTCACCCCTAAGCGCTGTCAACTATCCACTNCTACCGCTCCTCCTCTTTACG
GTTTGTACACGCCTGTCCCACTCT

Restriction Sites: NotI-NotI

ACCN: NM_006053

Insert Size: 2500 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:	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_006053.2, NP_006044.1
RefSeq Size:	2480 bp
RefSeq ORF:	1845 bp
Locus ID:	10312
UniProt ID:	Q13488
Cytogenetics:	11q13.2
Domains:	V_ATPase_sub_a
Protein Families:	Transmembrane
Protein Pathways:	Epithelial cell signaling in Helicobacter pylori infection, Lysosome, Metabolic pathways, Oxidative phosphorylation, Vibrio cholerae infection
Gene Summary:	This gene encodes a subunit of a large protein complex known as a vacuolar H+-ATPase (V-ATPase). The protein complex acts as a pump to move protons across the membrane. This movement of protons helps regulate the pH of cells and their surrounding environment. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, and receptor-mediated endocytosis. V-ATPase is comprised of a cytosolic V1 domain and a transmembrane V0 domain. Alternative splicing results in multiple transcript variants. Mutations in this gene are associated with infantile malignant osteopetrosis. [provided by RefSeq, May 2017] Transcript Variant: This variant (2) encodes isoform b, also known as the TCIR7 protein. This protein is expressed in T lymphocytes and is essential for normal T cell activation. This variant uses a transcription start site that is within exon 5 of variant 1, and it also includes the following intron as part of its 5' UTR. The encoded isoform (b) is shorter than isoform a.