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Product datasheet for SC117060

KRIT1 (NM_004912) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KRIT1 (NM_004912) Human Untagged Clone
Tag:	Tag Free
Symbol:	KRIT1
Synonyms:	CAM; CCM1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>NCBI ORF sequence for NM_004912, the custom clone sequence may differ by one or more nucleotides

ATGGGAAATCCAGAAAACATAGAAGATGCATATGTTGCTGTTATTCGTCCAAAGAATACTGCCAGTCTCA
ATTCTCGGGAATACAGAGCTAAGTCATATGAAATTTTGTTGCATGAAGTTCCCATTGAAGGACAGAAAAA
AAAGAGAAAGAAAGTTTTATTGGAAACGAAACTTCAAGGCAACAGTGAAATAACACAAGGCATATTGGAT
TACGTAGTAGAAACCACCAAACCAATTTCTCCTGCAAACCAGGGTATCAGAGGAAAACGAGTTGTACTAA
TGAAAAAATTTCCTCTGGATGGAGAGAAGATGGGCAGAGAAGCATCATTATTTATTGTTCCATCAGTTGT
CAAAGATAATACTAAATACACATATACCCCAGGATGCCCAATTTTTTACTGCTTACAAGATATTATGCGA
GTCTGTAGTGAATCCAGTACTCATTTTGCTACACTTACAGCAAGGATGTTAATAGCCTTGGATAAGTGGT
TAGATGAACGTCATGCACAATCTCACTTTATTCCAGCTTTATTCCGACCTTCTCCTCTTGAGCGGATAAA
AACTAATGTCATAAATCCTGCATATGCTACTGAATCAGGTCAGACAGAAAACTCACTACATATGGGCTAT
AGTGCACTAGAAATAAAGAGTAAAATGTTAGCCCTAGAGAAAGCAGATACCTGTATTTACAACCCTTTGT
TTGGATCAGATCTTCAGTATACAAATCGGGTAGATAAAGTGGTAATAAATCCATACTTTGGTCTAGGAGC
TCCAGACTACTCAAAAATCCAAATACCTAAACAGGAAAAATGGCAGAGAAGCATGAGCAGTGTCACAGAA
GACAAGGAACGACAGTGGGTAGATGATTTTCCTCTCCACCGAAGCGCCTGTGAAGGAGATTCAGAATTAC
TAAGCCGTCTTCTCAGTGAAAGATTTTCAGTCAACCAGTTAGATAGTGACCACTGGGCACCCATTCATTA
TGCATGCTGGTATGGAAAAGTTGAGGCCACTCGCATATTGTTAGAGAAAGGAAAGTGCAATCCAAACCTT
TTAAATGGACAACTTAGTTCTCCTCTTCATTTTGCTGCTGGAGGAGGACATGCTGAAATAGTACAGATTC
TCCTAAACCACCCAGAAACGGATAGACATATAACAGACCAACAAGGAAGATCTCCATTAAATATTTGTGA
AGAAAACAAACAAAACAACTGGGAAGAAGCTGCAAAATTGTTGAAGGAAGCAATTAACAAACCATATGAA
AAAGTTCGAATATACAGAATGGATGGGTCATATCGTTCTGTTGAATTGAAGCATGGAAATAATACCACAG
TGCAGCAGATAATGGAAGGAATGCGTCTCTCTCAAGAAACTCAGCAATATTTCACTATATGGATTTGTTC
AGAAAACCTCAGCCTTCAACTCAAACCATATCATAAACCCTTGCAACATGTTCGTGACTGGCCAGAAATA
CTTGCTGAATTGACTAATCTGGATCCTCAAAGGGAAACACCTCAGCTTTTTCTAAGAAGAGATGTGAGAC
TTCCCTTGGAAGTTGAAAAACAGATTGAAGACCCACTAGCTATTCTTATTCTCTTTGATGAAGCCAGATA
TAATTTATTGAAGGGCTTTTATACAGCTCCTGATGCTAAGCTGATAACATTGGCAAGTCTGCTTTTGCAA
ATAGTCTATGGAAATTATGAGAGTAAAAAACACAAGCAAGGTTTCCTAAATGAAGAAAATCTAAAATCCA
TCGTACCTGTTACCAAACTGAAAAGTAAGGCACCTCACTGGACAAATCGCATACTTCATGAATACAAGAA
TCTCAGTACAAGTGAAGGTGTCAGTAAAGAAATGCATCACCTTCAGCGCATGTTCTTACAGAATTGCTGG
GAAATTCCTACTTATGGAGCAGCATTTTTCACAGGACAGATATTTACAAAGGCAAGCCCCAGCAATCATA
AAGTCATCCCTGTGTATGTAGGAGTGAATATAAAAGGACTTCATCTCCTCAACATGGAAACTAAGGCTTT
ACTCATCAGTCTTAAGTATGGTTGTTTTATGTGGCAATTGGGAGATACTGATACTTGTTTTCAGATCCAT
AGCATGGAAAATAAAATGAGCTTTATAGTACATACAAAACAGGCTGGTCTCGTGGTAAAACTGTTAATGA
AGCTAAATGGACAGTTAATGCCCACTGAAAGAAATTCATGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004912 unedited
GGTTCACCAATTTGTAATACGACCTCACTATAGGCGGCCCGCGAATCGGCACGAGGCCTC
GTGCCGAATTCGGCACGAGGCACAAGGCATATTGGATTACGTAGTAGAAACCACCAAACC
AATTTCTCCTGCAAACCAGGGTATCAGAGGAAAACGAGTTGTACTAATGAAAAAATTTCC
TCTGGATGGAGAGAAGATGGGCAGAGAAGCATCATTATTTATTGTTCCATCAGTTGTCAA
AGATAATACTAAATACACATATACCCCAGGATGCCCAATTTTTTACTGCTTACAAGATAT
TATGCGAGTCTGTAGTGAATCCAGTACTCATTTTGCTACACTTACAGCAAGGATGTTAAT
AGCCTTGGATAAGTGGTTAGATGAACGTCATGCACAATCTCACTTTATTCCAGCTTTATT
CCGACCTTCTCCTCTTGAGCGGATAAAAACTAATGTCATAAATCCTGCATATGCTACTGA
ATCAGGTCAGACAGAAAACTCACTACATATGGGCTATAGTGCACTAGAAATAAAGAGTAA
AATGTTAGCCCTAGAGAAAGCAGATACCTGTATTTACAACCCTTTGTTTGGATCAGATCT
TCAGTATACAAATCGGGTAGATAAAGTGGTAATAAATCCATACTTTGGTCTAGGAGCTCC
AGACTACTCANAAATCCAAATACCTAAACAGGAAAAATGGCAGAGAAGCATGAGCAGTGT
CACAGAAGACAAGGAACGACAGTGGGTAGATGATTTTCCTCTCCACCCGAGCGCCTGTGA
ANGAGATTCAGAATTACTAAGCCGTCTTCTCAGTGAAAGATTTCAGTCAACCAGNTAGAT
AGTGACCCACTGGCACCCATTCTTATGCATGCCTGTATGGAAAAAGTTGAGCCACTCGCA
TATTGTTAGAGAAAGGAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004912 unedited
CGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTGAGATGGAGTCTTGCTGTGT
CACCCAGGCTAGCGTGCCGTGGTGCAATCTCGGCTCACTACAACCTCCACCTCCCGGGTT
TAAGCGATCTCCCACCTTGGCCTCCCTAGTAGCTAGGATTATAGGCGCCCGCCACCACAC
CCAGCTAATTTTTGCATTTCTGTAGAGACAGGGTTCCACCATGTTGGCACATCCTGGTAT
TGAACTCCTGACTTCAGGTGATACCGACTGCCACAAACCCCATAAACCGCCGAAATTCCA
CGAATGCCTTCTTCCCCCCCCTCCCTTATTCTTCCCCCGCCACCCAAACCCCCCCCCCAC
CCCCGAGTTCTTCTACCTAATCCGCTTCCCAATTCTCCTCCCCCCTCTCCCCCCTCTCAC
TCTTCCCACCCACACTCCTTCCCCCCCATCCCCCTACCCCCCTTTTTTCCCCCCACCCCA
CTTACTCCCCCCACCCCCCCCTCTCCCCATTTTTCTCATTCTTCTCACTCCCCTTCACTT
CCTTATCTCCAACCACTTCCCACCCCCCCCCTCCCTTCTACCCCCCCCCCCCCCCACACAT
ACCTCCCATCTTTATTTCTCTATCACTCCCCCCCCCTCCACCCTGCTGATAACCCACCAG
TTTACTTCCCTACTCTCTCTTCTTCCTTTCCCCCCCCCTCCTCACCATTTTACTTCTCCC
CTCCCCCCACTCCCTCCCACCCTTCTAATTCCTAAATCAACCCGAGTCCGCCGCGCCACC
CCCCCTCTCCCTCCTTTCCCTTTTTCCCCACTTCACCCACTCCCCCCCCATGACCTCCTAT
CCTCCCCTCCCCCCCTTCCTCCTCCTTTACTCCCCGCACCCCAACCCCCATGCCCCCTCC
CACCTCATACTCTCCTTTCTTCCCCCTCCCCT

Restriction Sites: NotI-NotI

ACCN: NM_004912

Insert Size: 2600 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_004912.3, NP_004903.2
RefSeq Size:	4870 bp
RefSeq ORF:	2211 bp
Locus ID:	889
UniProt ID:	O00522
Cytogenetics:	7q21.2
Domains:	B41, ANK
Protein Families:	Druggable Genome
Gene Summary:	This gene encodes a protein containing four ankyrin repeats, a band 4.1/ezrin/radixin/moesin (FERM) domain, and multiple NPXY sequences. The encoded protein is localized in the nucleus and cytoplasm. It binds to integrin cytoplasmic domain-associated protein-1 alpha (ICAP1alpha), and plays a critical role in beta1-integrin-mediated cell proliferation. It associates with junction proteins and RAS-related protein 1A (Rap1A), which requires the encoded protein for maintaining the integrity of endothelial junctions. It is also a microtubule-associated protein and may play a role in microtubule targeting. Mutations in this gene result in cerebral cavernous malformations. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2009] Transcript Variant: This variant (2) lacks the 5' exon but has an alternate segment in the 5' UTR, as compared to variant 1. Variants 1-4 encode the same isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.