

Product datasheet for **MR218801**

Krt2 (NM_010668) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Krt2 (NM_010668) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Krt2
Synonyms:	BB005427; Krt2-2; Krt2-17; Krt2e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR218801 representing NM_010668, codon optimized.
Due to the complexity of NM_010668, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTTTGCCAGATTTCTTGCAGAAGCAGGCGCGGCGGGGGGGGGTGGCGGGGGTTCGGGGGT
TCTCATCCGGATCAGCGGTAGTGTCTGGAGGCTCTCGGCGGTCCAATACTCTTTTTCATGTATCAGTCG
GCACGGTGGTGGTCGGGAGGGTCAGGTGGAGGGGATTTGGCTCTCAAAGCCTTGTGGGCTTGGCGGC
TACAAGTCTATTAGCTCTTCTGTGGCTGGCAATAGCGGCGGTTACGGAGGAAGCAGTTTTGTGGGAGTT
CCGGTTTTGGTGGGGGGCGGGGTTCCGGTGGTGGACAAGGTTTTGGTGGTTCAGGCGGGTTCGGAGGTGG
CTCAGGCTTTGGCGGAGGGCAGGGCTTTGGCGGAGGCTCCCGGTTCCGGGGAGGTTCCGGCTTCGGGGGA
GGAGGCTTCGGGGGAGGGTCTTCGGAGGAGGACGGTTTTGGTGGCGGTCCCGGTGGTTTCGGGGACCCG
GTGGGTTCCCTGGAGGCGGGATTCATGAAGTTAGCGTCAATCAGTCATTGTTGCAGCCCTGGATGTGAA
GGTCGATCCGAAATTCAAAATGTAAGAGCCAGGAGAGAGAACAGATCAAAACCTGAATAATAAGTTC
GCATCCTCATAGACAAGGTACGGTTCCTCGAGCAGCAGAATCAAGTGTGAGAACTAAATGGGAGCTGC
TGCAACAACAGTGGATGTCGGCAGCCGCACTACCAACCTCGACCCATCTTTCAGGCTTACATCGGCATGTT
GAAGAAGCAAGTAGACCGGTTGTCCGCTGAGCGAACTAGCCAAGAGTCCGAACTTAACAATATGCAAGAC
CTGGTGGAAAGATTTCAAAAAGAAGTATGAGGATGAGATAAACAAGGACAAGCGCCGAAAACGACTTCG
TTACCATTAAGAAAGATGTGACTCATGTATATGGATAAGACGGAATTGCAAGCACGCCTCGACATTCT
GGCCAGGAAGTTAATTTCTCCGACTTTGTACGATGCCGAGTTGTCCAGCTCCAGCAAGATGTTACC
GATACCAACGTGATCCTTTCTATGGACAACAACCGGAATCTGGATCTTGATTCTATTATCGCCGAGGTCC
AGAATCAGTACGAAATGATCGCTCATAAGTCTAAGGCTGAGAGCGAGGAGCTTTACCATTCAAAATACGA
GGAGCTCCAGGTAAACAGCCGTCAGCATGGAGACTCCCTCAAGGAGATCAAGATGGAGATCTCTGAGCTG
AATCGCACGATCCAGAGGCTTCAGGGCGAGATTTCCACGTTAAAAGCAGTGTAAGGGGTTCCAGGATT
CTATCGCCGACGCTGAGCAGCGGGTGAACACGCCATTAAGGACGCCGAGGCAAGTTGACCGATCTTGA
GGAGGCTCTTACGAGTCCCGCAAGATCTGGCCAGACTTTGAGGGACTACCAGGAGCTGATGAATACT
AAGCTGTCACTGGATGTGGAGATCGCAACATATCGCAAGTTGCTGGAAGGTGAGGAATGTAGAATGCCG
GGGACTTCTCAGATAATGTGAGCGTGTCTACTAGTTCACGATTTCTCTTCCGTGGCTTCCAAAAC
CGGATTCGGGAGTGGAGGTGAGTAGCGGGGGTCCGGGGTCTTACGGCGGGCGCGGAGGAGCGCGCGC
GGAGGAAGCACCTACGGTTCAGGAGGCCGAGTCCGGATCAAGAGGTAGCGGGAGCGGCAGTGGGGCG
GGGGTATTCTCCGAGGGGGCAGCAGAGGTGGCTCCGGGGCGGATATGGTTCTGGTGGCGGTTCCCG
CGGGGCTCTGGGGCGGGTACGGCAGCGGGGGCGCAGTGGCAGCGGTGGTGGTACAGCAGCGGAGGC
GGCAGCCGGGGTGGTTCTGGCGCGGGGAGTTTCAAGCGGGGAGGATCAAGGGCGGCAGCTCCTCAG
GGGAGGCTCACGCGCCGATCCTCTCCGGCGCGCGGTTACAGTAGTGGCGCGGAAGCCGGGGTGG
TTCTAGCTCCGGCGCGCCGCGAGTTCATCCGAAAAGGTTGCGAGCGGTCGGGGAGGGCTCGGGAAGC
GGAGTGACATTCTCTTTAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218801 representing NM_010668
Red=Cloning site Green=Tags(s)

MSCQISCRSRGGGGGGGGFRGFSSGS AVVSGGSRRSNTSFSCISRHHGGGRGGSGGGFSGSLVGLGG
YKSISSSVAGNSGGYGGSSFGSSGFGGGRGFGGGQFGGSGGFGGGSGFGGGQFGGGSRFGGGSGFGG
GGFGGGSFGGGRFGGGPGGFGGPGGFPGGGIHEVSVNQSLQLPLDVKVDPEIQNVKQEREQIKTLNKKF
ASFIDKVRFLQQNQVLRRTKWEELLQQLDVGSRRTNLDPIFQAYIGMLKKQVDRLSAERTSQESELNMQD
LVEDFKKYEDEINKRTSAENDFVTIKKDVDSYMDKTELQARLDILAQEVNFLRRTLYDAELSQLQQDVT
DTNVILSMDNNRNLDLDSIIAEVQNQYEMIAHKSKAESEELYHSHKYEELQVTAVKHGDSLKEIKMEISEL
NRTIQRLQGEISHVKKQCKGVQDSIADAEQRGEHAIKDARGKLTDL EALQQCREDLARLLRDYQELMNT
KLSLDVEIATYRKLLEGE ECRMSGDFSDNVSVSITSSSTISSSVASKTGFSGGQSSGGRSYGGRRGGGG
GGSTYSGGRRSSGSRGSGSGSGGGGYSSGGSRGGSGGGYSGGGSRGGSGGGYSGGGSGSGGGYSSGG
GSRGGSGGGVSSGGSRGGSSSGGSRGGSSSGGGYSSGGSRGGSSSGGAGSSSEKGGSGSGEGCGS
GVTFSFR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:


ACCN: NM_010668

ORF Size: 2121 bp

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:

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_010668.1](#), [NM_010668.2](#), [NP_034798.2](#)

RefSeq Size: 2629 bp

RefSeq ORF: 2124 bp

Locus ID: 16681

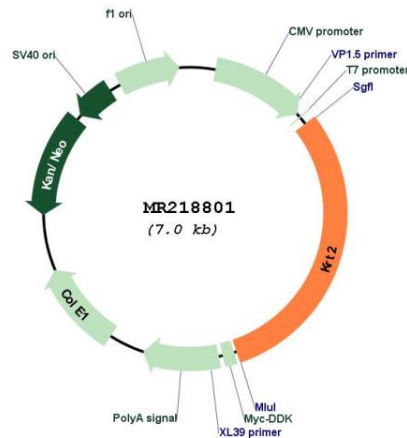
UniProt ID: [Q3TTY5](#)

Cytogenetics: 15 57.03 cM

MW: 70.9 kDa

Gene Summary: Probably contributes to terminal cornification (By similarity). Associated with keratinocyte activation, proliferation and keratinization (By similarity). Plays a role in the establishment of the epidermal barrier on plantar skin (PubMed:26603179).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218801