

Product datasheet for **RC227513**

BTN3A1 (NM_001145008) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BTN3A1 (NM_001145008) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BTN3A1
Synonyms:	BT3.1; BTF5; BTN3.1; CD277
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC227513 representing NM_001145008
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAAATGGCAAGTTTCTGGCCTTCTTCTGCTCAACTTTCGTGTCTGCCTCCTTTTGCCTCAGCTGC
 TCATGCCTCACTCAGCTCAGTTTTCTGTGCTTGGACCCTCTGGGCCATCCTGGCCATGGTGGTGAAGA
 CGCTGATCTGCCCTGTCACTTGTCCCGACCATGAGTGCAGAGACCATGGAGCTGAAGTGGTGAGTTCC
 AGCCTAAGGCAGGTGGTGAACGTGTATGCAGATGGAAAGGAAGTGAAGACAGGCAGAGTGCACCGTATC
 GAGGGAGAACTTCGATTCGCGGATGGCCTACTGCAGGGAAGGCTGCTCTCGAATACACAACGTAC
 AGCCTCTGACAGTGGAAAGTACTTGTGTTATTTCCAAGATGGTGACTTCTATGAAAAAGCCCTGGTGGAG
 CTGAAGTTGCAGACGGAGTGGCCTGTATGCAGTAGCAGCATCTGTGATCATGAGAGGCAGCTCTGGG
 AGGGTGTATCCTGTACCATCAGAAGTCCCTCCTCGGCCCTGAAAAGACAGCCAGCATTTCCATCGCAGA
 CCCCTTCTCAGGAGCGCCAGAGGTGGATCGCCGCCCTGGCAGGGACCCTGCCTGTCTTGTCTGCTCTT
 CTTGGGGGAGCCGTTACTTCTGTGGCAACAGCAGGAGGAAAAAAGACTCAGTTCAGAAAAGAAAAAGA
 GAGAGCAAGAGTTGAGAGAAATGGCATGGAGCACAATGAAGCAAGAACAAGCACAAGAGTGAAGCTCCT
 GGAGAACTCAGATGGAGAAGTATCCAGTATGCATCTCGGGGAGAGAGACATTCAGCCTATAATGAATGG
 AAAAAGGCCCTCTTCAAGCCTGCGGATGTGATTCTGGATCCAAAAACAGCAAACCCCATCCTCCTTGTTT
 CTGAGGACCAGAGGAGTGTGCAGCGTGCCAAGGAGCCCAAGGATCTGCCAGACAACCTGAGAGATTTAA
 TTGGCATTATTGTGTTCTCGGCTGTGAGAGCTTCATATCAGGGAGACATTACTGGGAGGTGGAGGTAGGG
 GACAGGAAAGAGTGGCATATAGGGGTGTGAGTAAGAATGTGCAGAGAAAAGGCTGGGTCAAATGACAC
 CAGAAATGGATTCTGGACTATGGGCTGACTGATGGAATAAGTATCGGACTCTAACTGAGCCAGACA
 CAACCTGAAACTTCTAAGCCCCCTAAGAAAGTGGGGTCTTCTGGACTATGAGACTGGAGATATCTCA
 TTCTACAATGCTGTGGATGGATCGCATATTCATACTTTCTGGACGTCTCCTTCTGAGGCTCTATATC
 CTGTTTTCAGAATTTTGACCTTGAGGCCACGGCCCTGACTATTTGTCCAGCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227513 representing NM_001145008
 Red=Cloning site Green=Tags(s)

MKMASFLAFLLLNFRVCLLLLQLLMPHSAQFVSLGSPGPILAMVGEDADLPCHLFPTMSAETMELKWVSS
 SLRQVVVYADGKEVEDRQSAPYRGRSILRDGITAGKAALRIHNVTASDSGKYLQYFQDGFYEKALVE
 LKVADGVGLYAVAASVIMRGSSGEGVSTIRSSLLGLEKTASISADPFFRSAQRWIAALAGTLPVLLLL
 LGGAGYFLWQQEKKTFRKKKREQLREMAWSTMKQEQSTRVKLLEELRWRSIQYASRGERHSAYNEW
 KKALFKPADVILDPKTANPILLVSEDQRSVQRAKEPQDLDPNPERFNWHYCVLGCEFSISGRHYWEVEVG
 DRKEWHIGVCSKNVQRKGWVKMTPENGFWTMGLTDGNKYRTLTEPRNLKLPKPPKVGVFLDYETGDIS
 FYNAVDGSHIHTFLDVSFSEALYPVFRILTLEPTALTICPA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

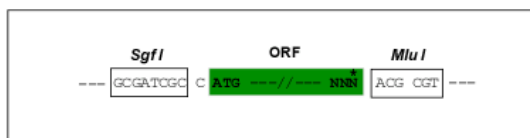
https://cdn.origene.com/chromatograms/mk8061_e09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_001145008

ORF Size: 1383 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_001145008.2](#)

RefSeq ORF: 1386 bp

Locus ID: 11119

UniProt ID: [O00481](#)

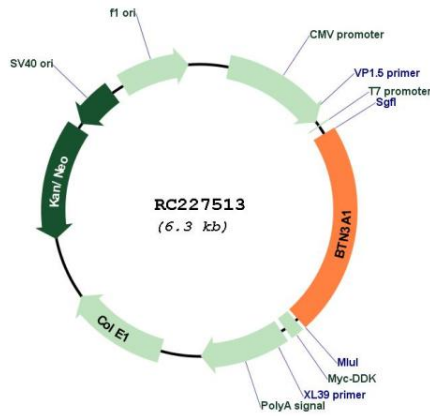
Cytogenetics: 6p22.2

Protein Families: Druggable Genome, Transmembrane

MW: 51.8 kDa

Gene Summary: The butyrophilin (BTN) genes are a group of major histocompatibility complex (MHC)-associated genes that encode type I membrane proteins with 2 extracellular immunoglobulin (Ig) domains and an intracellular B30.2 (PRYSPRY) domain. Three subfamilies of human BTN genes are located in the MHC class I region: the single-copy BTN1A1 gene (MIM 601610) and the BTN2 (e.g., BTN2A1; MIM 613590) and BTN3 (e.g., BNT3A1) genes, which have undergone tandem duplication, resulting in 3 copies of each (summary by Smith et al., 2010 [PubMed 20208008]).[supplied by OMIM, Nov 2010]

Product images:



Circular map for RC227513