

Product datasheet for RC201183

BTN3A2 (NM_007047) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BTN3A2 (NM_007047) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BTN3A2
Synonyms:	BT3.2; BTF4; BTN3.2; CD277
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201183 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAATGGCAAGTTCCTGGCTTTCCTTCTGCTCAACTTTCATGTCTCCCTCCTTGGTCCAGCTGC
TCACTCCTTGCTCAGCTCAGTTTCTGTGCTTGGACCTCTGGGCCATCCTGGCCATGGTGGTGAAGA
CGCTGATCTGCCCTGTCACCTGTCCCGACCATGAGTGCAGAGACCATGGAGCTGAAGTGGTAAAGTTCC
AGCCTAAGGCAGGTGGTGAACGTGTATGCAGATGGAAAGGAAGTGAAGACAGGCAGAGTGCACCGTATC
GAGGGAGAACTTCGATTCTGCGGGATGGCATCACTGCAGGAAGGCTGCTCTCGAATACACAACGTCAC
AGCCTCTGACAGTGGAAAGTACTTGTGTTATTTCCAAGATGGTGACTTCTATGAAAAAGCCCTGGTGGAG
CTGAAGGTTGCAGCACTGGGTTCTAATCTTACAGTGAAGGTTATGAGGATGGAGGGATCCATC
TGGAGTGCAGGTCCACCGGCTGGTACCCCAACCCCAATACAGTGGAGCAACGCCAAGGGAGAGAACAT
CCCAGCTGTGGAAGCACCTGTGGTTGCAGATGGAGTGGGCCTATATGAAGTAGCAGCATCTGTGATCATG
AGAGGCGGCTCCGGGGAGGGTGTATCCTGCATCATCAGAAATTCCTCCTCGGCCTGGAAAAACAGCCA
GCATTTCCATCGCAGACCCCTTCTCAGGAGCGCCAGCCCTGGATCGCAGCCCTGGCAGGGACCCCTGCC
TATCTTGCTGCTGCTTCTCGCCGGAGCCAGTTACTTCTTGTGGAGACAACAGAAGGAAATAACTGCTCTG
TCCAGTGAATAGAAAGTGAAGAGATGAAAGAAATGGGATATGCTGCAACAGAGCGGAAATAAGCC
TAAGAGAGAGCCTCCAGGAGAACTCAAGAGGAAAAAATCCAGTACTTGACTCGTGGAGAGGAGTCTTC
GTCCGATACCAATAAGTCAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201183 protein sequence
Red=Cloning site Green=Tags(s)

MKMASSLAFLLLNFHVSLLL VQLLTPCSAQF SVLGPSPILAMVGEDADLPCHLFP TMSAETMELKWVSS
 SLRQVVVYADGKEVEDRQSAPYRGRTSILRDGITAGKAALRIHNV TADSGKYL CYFQDGFYEKALVE
 LKVAALGSNLHVEVKGYEDGGIHL ECRSTGWYQPQIQW SNAKGENIPAVEAPV VADGVGLYEVAASVIM
 RGGSGEGVSCIIRNSLLGLEKTASIS IADPFFRSAQPWIAALAGTLP ILLLLLAGASYFLWRQQEITAL
 SSEIESEQEMKEMGYAATEREISLRESLQEELKRKKIQYLTRGEESSSDTNKSA

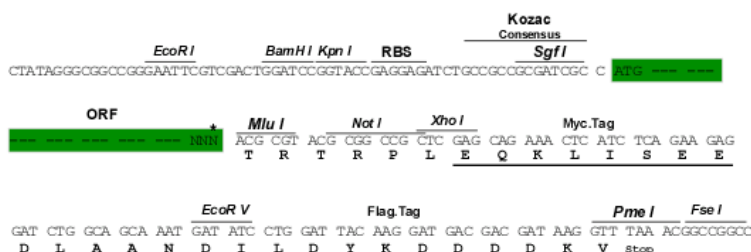
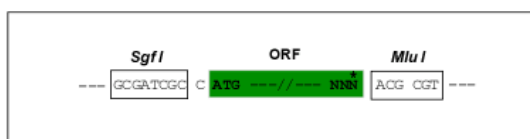
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6150_h02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_007047

ORF Size: 1005 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_007047.5](#)

RefSeq Size: 3776 bp

RefSeq ORF: 1005 bp

Locus ID: 11118

UniProt ID: [P78410](#)

Cytogenetics: 6p22.2

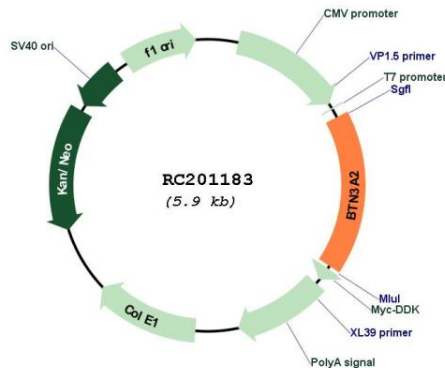
Domains: IGv, IG

Protein Families: Druggable Genome, Transmembrane

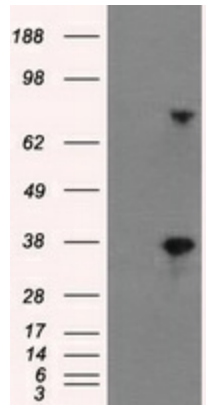
MW: 36.4 kDa

Gene Summary: This gene encodes a member of the immunoglobulin superfamily, which resides in the juxta-telomeric region of the major histocompatibility class 1 locus and is clustered with the other family members on chromosome 6. The encoded protein may be involved in the adaptive immune response. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2013]

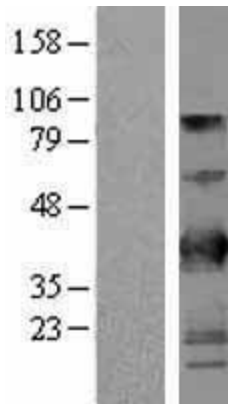
Product images:



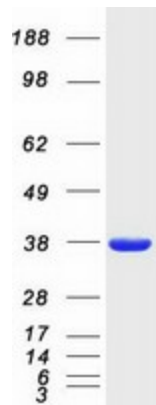
Circular map for RC201183



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BTN3A2 (Cat# RC201183, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-BTN3A2(Cat# [TA500730]). Positive lysates [LY402082] (100ug) and [LC402082] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402082]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201183 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BTN3A2 protein (Cat# [TP301183]). The protein was produced from HEK293T cells transfected with BTN3A2 cDNA clone (Cat# RC201183) using MegaTran 2.0 (Cat# [TT210002]).