

Product datasheet for RC203745

BTN2A1 (NM_078476) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BTN2A1 (NM_078476) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BTN2A1
Synonyms:	BK14H9.1; BT2.1; BTF1; BTN2.1; DJ3E1.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203745 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAATCAGCTGCTGCCCTGCACTTCTCCCGCCAGCCTCCCTCCTCCTCCTCCTCAGCCTGTGTG
CACTGGTCTCAGCCAGTTTATTGTCGTGGGGCCACTGATCCCATCTTGGCCACGGTTGGAGAAAAAC
TACGTTACGCTGCCATCTGTCACCCGAGAAAAATGCTGAGGACATGGAGGTGCGGTGTTCCGGTCTCAG
TTCTCCCCCGAGTGTGGTATAAAGGTGGCAGAGAGAGAACAGAGGAGCAGATGGAGGAGTACCGAG
GAAGAACCACCTTGTGAGCAAAGACATCAGCAGGGGCAGCGTGGCCCTGGTCATACACAACATCACAGC
CCAGGAAAACGGCACCTACCGCTGTTACTTCCAAGAAGGCAGGTCTACGATGAGGCCATCCTGCACCTC
GTAGTGGCAGGACTAGGCTCTAAGCCCCCATTTCATGAGGGGCCATGAAGACGGGGGCATCCGGCTGG
AGTGCATATCTAGAGGGTGGTACCCAAAGCCCCTCACAGTGTGGAGGGACCCCTACGGTGGGGTTGCGCC
TGCCCTGAAAGAGGTCTCCATGCCTGATGCAGACGGCCTTTCATGGTCACCACGGCTGTGATCATCAGA
GACAAGTCTGTGAGGAACATGCCTGCTCTATCAACAACCCCTGCTCGGCCAGAAGAAAGAAAGTGTCA
TTTTTATCCAGAATCCTTTATGCCAGTGTGTCTCCCTGTGCAGTGGCCCTGCCTATCATTGTGGTTAT
TCTGATGATACCCATTGCCGATGCATCTATTGGATCAACAACTCCAAAAGGAAAAAAGATTCTGTCA
GGGAAAAGGAGTTTGAACGGGAAACAAGAGAAATTGCTCTAAAGGAACCTGGAGAAAGACGTGTGCAAA
AAGAGGAAGAACTTCAAGTAAAAGAGAACTTCAAGAAGAATTGCGATGGAGAAGAACATTCTTACATGC
TGAGCTCCAATTCTTCTCAAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203745 protein sequence
 Red=Cloning site Green=Tags(s)

MESAAALHFSRPASLLLLLLSLCALVSAQFIVVGPTDPILATVGENTTLRCHLSPEKNAEDMEVRWFRSQ
 FSPAVFVYKGGRETEEQMEEYRGRITTFVSKDISRGSVALVIHNITAQENGTYRCYFQEGRSYDEAILHL
 VVAGLGSKPLISMARGHEDGGIRLECISRGWYPKPLTVWRDPYGGVAPALKEVSMPPADGLFMVTTAVIIR
 DKSVRNMSCSINNTLLGQKKEVIFIPESFMPSPCAVALPIIVVILMIPIAVCIYWINKLQKEKKILS
 GEKEFERETREIALKELEKERVQKEEELQVKEKLQEELRWRRTFLHAELQFFSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6310_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_078476

ORF Size: 1002 bp

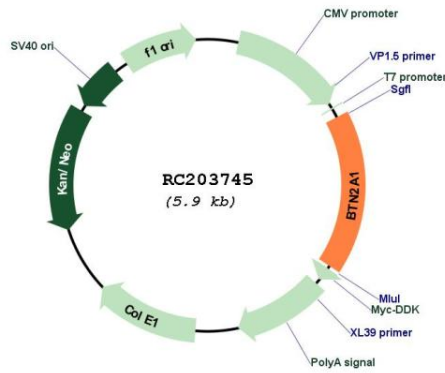
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

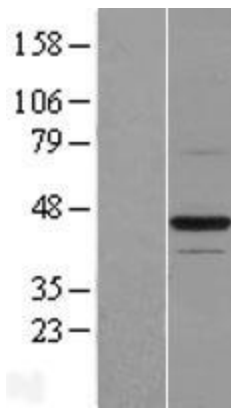
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_078476.4
RefSeq Size:	3186 bp
RefSeq ORF:	1005 bp
Locus ID:	11120
UniProt ID:	Q7KYR7
Cytogenetics:	6p22.2
Domains:	IGv, IG
Protein Families:	Druggable Genome, Transmembrane
MW:	37.9 kDa
Gene Summary:	This gene encodes a member of the immunoglobulin superfamily. The gene is located in a cluster of butyrophilin-like genes in the juxta-telomeric region of the major histocompatibility complex on chromosome 6. A pseudogene of this gene has been identified in this cluster. The encoded protein is an integral plasma membrane protein involved in lipid, fatty-acid, and sterol metabolism. Alterations in this gene may be associated with several disease states including metabolic syndrome. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2013]

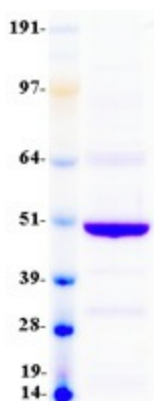
Product images:



Circular map for RC203745



Western blot validation of overexpression lysate (Cat# [LY409188]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203745 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BTN2A1 protein (Cat# [TP303745]). The protein was produced from HEK293T cells transfected with BTN2A1 cDNA clone (Cat# RC203745) using MegaTran 2.0 (Cat# [TT210002]).