

Product datasheet for **RC220942**

CT45A2 (NM_152582) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CT45A2 (NM_152582) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CT45A2
Synonyms:	CT45-2; CT45.2; CT45A8; CT45A9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220942 representing NM_152582 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGACCGATAAAACAGAGAAGGTGGCTGTAGATCCTGAACTGTGTTAAACGTCCCAGGGAATGTGACA
GTCCTTCGTATCAGAAAAGGCAGAGGATGGCCCTGTTGGCAAGGAAACAAGGAGCAGGAGACAGCCTTAT
TGCAGGCTCTGCCATGTCCAAAGAAAAGAAGCTTATGACAGGACATGCTATTCACCCAGCCAATTGGAT
TCTCAGATTGATGACTTCACTGGTTTCAGCAAAGATAGGATGATGCAGAAACCTGGTAGCAATGCACCTG
TGGGAGGAAACGTTACCAGCAGTTTCTCTGGAGATGACCTAGAATGCAGAGAAACAGCCTCCTCTCCCAA
AAGCCAACGAGAAATTAATGCTGATATAAAACGTAAATAGTGAAGGAACCTCCGATGCGTTGGACAAAAA
TATGAAAAATCTTCGAAATGCTTGAAGGAGTGAAGGACCTACTGCAGTCAGGAAGCGATTTTTTGAAT
CCATCATCAAGGAAGCAGCAAGATGTATGAGACGAGACTTTGTTAAGCACCTTAAGAAGAAACTGAAACG
TATGATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC220942 representing NM_152582 Red=Cloning site Green=Tags(s)
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MTDKTEKVAVDPETVFKRPRECDSPSYQKRQRMALLARKQGAGDSLIAGSAMSKEKKLMTGHAIPPSQLD
SQIDDFTGFSKDRMMQKPGSNAPVGGNVTSSFSGDDLECRETASSPKSQREINADIKRKLVKELRCVGQK
YEKIFEMLEGVQGPTAVRKRFFESIIEAARCMRRDFVKHLKKLKRMI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV


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Chromatograms: https://cdn.origene.com/chromatograms/mk6113_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_152582

ORF Size: 567 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_152582.1](#)

RefSeq Size: 1032 bp

RefSeq ORF: 570 bp

Locus ID: 728911

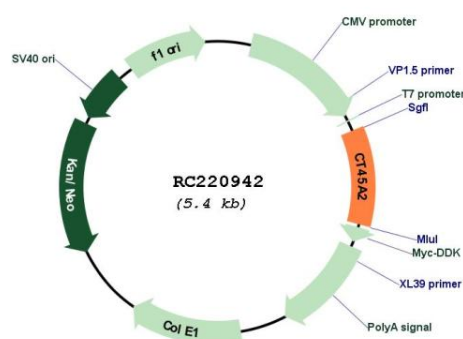
UniProt ID: [Q5DJT8](#)

Cytogenetics: Xq26.3

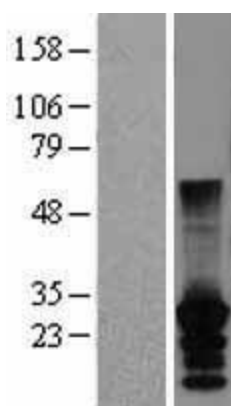
MW: 21.1 kDa

Gene Summary: This gene represents one of a cluster of several similar genes located on the q arm of chromosome X. The genes in this cluster encode members of the cancer/testis (CT) family of antigens, and are distinct from other CT antigens. These antigens are thought to be novel therapeutic targets for human cancers. [provided by RefSeq, Apr 2014]

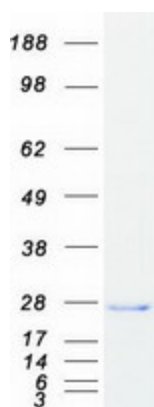
Product images:



Circular map for RC220942



Western blot validation of overexpression lysate (Cat# [LY403478]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220942 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CT45A2 protein (Cat# [TP320942]). The protein was produced from HEK293T cells transfected with CT45A2 cDNA clone (Cat# RC220942) using MegaTran 2.0 (Cat# [TT210002]).