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Product datasheet for MR223946

Tnfrsf14 (NM_178931) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tnfrsf14 (NM_178931) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tnfrsf14
Synonyms:	Atar; HveA; Hvem; Tnfrs14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR223946 representing NM_178931
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAACCTCTCCCAGGATGGGGGTCGGCACCCTGGAGCCAGGCCCCTACAGACAACACCTTCAGGCTGG
TGCCTTGTGTCTTCCTTTTGAACTTGCTGCAGCGCATCTCTGCCCAGCCCTCATGCAGACAGGAGGAGTT
CCTTGTGGGAGACGAGTGCTGCCCCATGTGCAACCCAGGTTACCATGTGAAGCAGGTCTGCAGTGAGCAT
ACAGGCACAGTGTGTGCCCCCTGTCCCCCACAGACATATACCGCCCATGCAAATGGCCTGAGCAAGTGTC
TGCCCTGCGGAGTCTGTGATCCAGACATGGGCCTGCTGACCTGGCAGGAGTGCTCCAGCTGGAAGGACAC
TGTGTGCAGATGCATCCCAGGCTACTTCTGTGAGAACCAGGATGGGAGCCACTGTTCCACATGCTTGCAG
CACACCACCTGCCCTCCAGGGCAGAGGGTAGAGAAGAGAGGGACTCACGACCAGGACACTGTATGTGCTG
ACTGCCTAACAGGGACCTTCTCACTTGGAGGGACTCAGGAGGAATGCCTGCCCTGGACCAACTGCAGTGC
ATTTCAACAGGAAGTAAGACGTGGGACCAACAGCACAGACACCACCTGCTCCTCCCAGGTCGTCTACTAC
GTTGTGTCCATCCTTTTGCCACTTGTGATAGTGGGAGCTGGGATAGCTGGATTCCTCATCTGCACGCGAA
GACACCTGCACACCAGCTCAGTGGCCAAGGAGCTGGAGCCTTTCCAGGAACAACAGGAGAACACCATCAG
GTTTCCAGTCACCGAGGTTGGGTTTGCTGAGACCGAGGAGGAGACAGCCTCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>MR223946 representing NM_178931
Red=Cloning site Green=Tags(s)

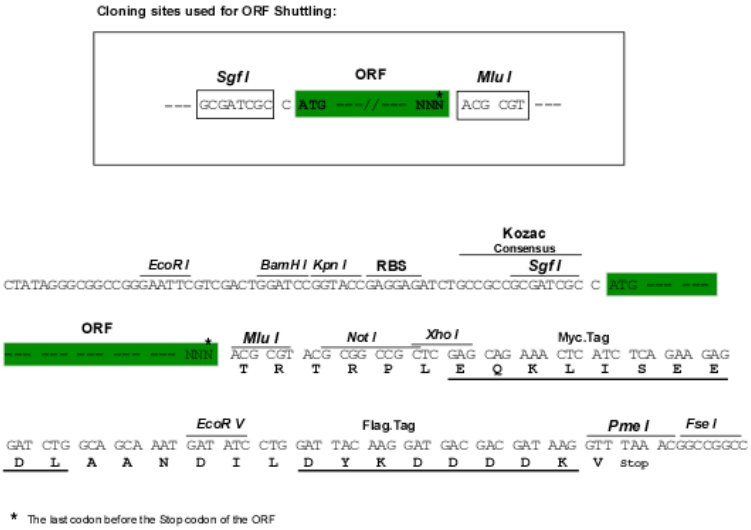
MEPLPGWGSAPWSQAPTDNTFRLVPCVFLLNLLQRISAQPSCRQEEFLVGDECCPMCNPGYHVKQVCSEH
TGTVCAPCPPQTYTAHANGLSKCLPCGVCDPDMGLLTWQECSSWKDTVCRCIPGYFCENQDGSHCSTCLQ
HTTCPPGQRVEKRGTHDQDTVCADCLTGTFSLGGTQEECLPWTNCSAFQQEVRRGTNSTDTTCSSQVVYY
VVSILLPLVIVGAGIAGFLICTRRHLHTSSVAKELEPFQEQQENTIRFPVTEVGFAETEEETASN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja3395_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178931

ORF Size: 825 bp

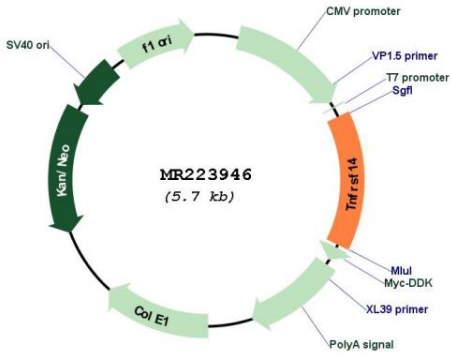
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

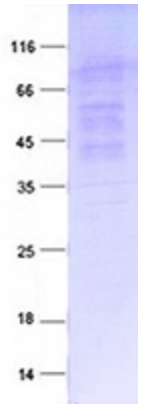
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_178931.2, NP_849262.1
RefSeq Size:	893 bp
RefSeq ORF:	828 bp
Locus ID:	230979
UniProt ID:	Q80WM9
Cytogenetics:	4 E2
MW:	30.2 kDa
Gene Summary:	Receptor for four distinct ligands: The TNF superfamily members TNFSF14/LIGHT and homotrimeric LTA/lymphotoxin-alpha and the immunoglobulin superfamily members BTLA and CD160, altogether defining a complex stimulatory and inhibitory signaling network (By similarity). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:19915044). Participates in bidirectional cell-cell contact signaling between antigen presenting cells and lymphocytes. In response to ligation of TNFSF14/LIGHT, delivers costimulatory signals to T cells, promoting cell proliferation and effector functions (By similarity). Interacts with CD160 on NK cells, enhancing IFNG production and anti-tumor immune response (PubMed:25711213). In the context of bacterial infection, acts as a signaling receptor on epithelial cells for CD160 from intraepithelial lymphocytes, triggering the production of antimicrobial proteins and proinflammatory cytokines (PubMed:22801499). Upon binding to CD160 on activated CD4+ T cells, downregulates CD28 costimulatory signaling, restricting memory and alloantigen-specific immune response (By similarity). May interact in cis (on the same cell) or in trans (on other cells) with BTLA (PubMed:19915044, PubMed:15568026). In cis interactions, appears to play an immune regulatory role inhibiting in trans interactions in naive T cells to maintain a resting state. In trans interactions, can predominate during adaptive immune response to provide survival signals to effector T cells (PubMed:19915044, PubMed:15568026).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR223946



Coomassie blue staining of purified Tnfrsf14 protein (Cat# [TP523946]). The protein was produced from HEK293T cells transfected with Tnfrsf14 cDNA clone (Cat# MR223946) using MegaTran 2.0 (Cat# [TT210002]).