

Product datasheet for **RG203816**

HLA-DOA (NM_002119) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLA-DOA (NM_002119) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HLA-DOA
Synonyms:	HLA-DNA; HLA-DZA; HLADZ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203816 representing NM_002119 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCCCTCAGAGCAGGGCTGGTCCTGGGGTTCACACCCTGATGACCCTCCTGAGCCCGCAGGAGGCAG
GGGCCACCAAGGCTGACCACATGGGCTCCTACGGACCCGCCTTCTACCAGTCTTACGGCGCCTCGGGCCA
GTTCAACCATGAATTTGATGAGGAACAGCTGTTCTCTGTGGACCTGAAGAAAAGCGAGGCCGTGTGGCGT
CTGCCTGAGTTTGGCGACTTTGCCCGCTTTGACCCGAGGGCGGGCTGGCCGGCATCGCCGAATCAAAG
CCCATCTGGACATCCTGGTGGAGCGCTCCAACCGCAGCAGAGCCATCAACGTGCCTCCACGGGTGACCGT
GCTCCCCAAATCTCGGGTGGAGCTGGGCCAGCCAAACATCCTCATCTGCATCGTGGACAACATCTTCCCC
CCTGTGATCAATATCACCTGGCTGCGCAACGGCCAAACTGTCACTGAGGGAGTGGCCAGACCAGCTTCT
ATTCCCAGCCTGACCATTTGTTCCGCAAGTTCCACTACCTGCCCTTCGTGCCCTCAGCCGAGGACGTCTA
TGACTGCCAGGTGGAGCACTGGGGCCTGGATGCGCCACTCCTCAGGCATTGGGAGCTCCAGGTGCCTATT
CCACCACCAGATGCCATGGAGACCCTGGTCTGTGCCCTGGGCCTGGCCATCGGCCCTGGTGGGCTTCTCTCG
TGGCACCGTCTCATCATATGGGCACATATGTGTCCAGTGTCCCCAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG203816 representing NM_002119
 Red=Cloning site Green=Tags(s)

MALRAGLVLGFHTLMTLLSPQEAGATKADHMGSYGPAFYQSYGASGQFTHEFDDEQLFSVDLKKSEAVWR
 LPEFGDFARFDPQGGLAGIAAIKAHLIDLVERSNRSRAINVPPRVTVLPKSRVELGQPNILICIVDNIFF
 PVINITWLRNGQTVTEGVAQTSFYSPDHLFRKFHYLPFVPSAEDVYDCQVEHWGLDAPLLRHWELQVPI
 PPPDAMETLVCALGLAIGLVGFLVGTVLIIMGTYYSSVPR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002119

ORF Size: 750 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_002119.2](#)

RefSeq Size: 3485 bp

RefSeq ORF: 753 bp

Locus ID: 3111

UniProt ID: [P06340](#)

Cytogenetics: 6p21.32

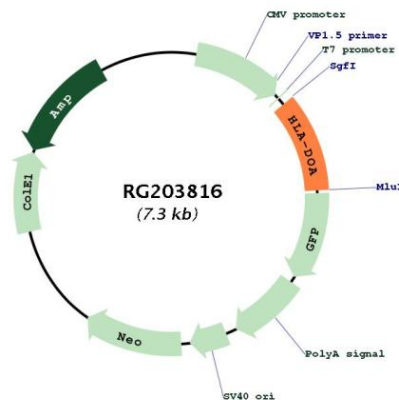
Domains: MHC_II_alpha, ig, IGc1

Protein Families: Transmembrane

Protein Pathways: Allograft rejection, Antigen processing and presentation, Asthma, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Graft-versus-host disease, Systemic lupus erythematosus, Type I diabetes mellitus, Viral myocarditis

Gene Summary: HLA-DOA belongs to the HLA class II alpha chain paralogues. HLA-DOA forms a heterodimer with HLA-DOB. The heterodimer, HLA-DO, is found in lysosomes in B cells and regulates HLA-DM-mediated peptide loading on MHC class II molecules. In comparison with classical HLA class II molecules, this gene exhibits very little sequence variation, especially at the protein level. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG203816