

## Product datasheet for **RG223979**

### HLA-DQA2 (NM\_020056) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HLA-DQA2 (NM_020056) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HLA-DQA2
Synonyms:	DC-alpha; DX-ALPHA; HLA-DCA; HLA-DXA; HLA-DQA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG223979 representing NM_020056 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATCCTAAACAAAGCTCTGCTGCTGGGGCCCTCGCCCTGACTGCCGTGATGAGCCCCTGTGGAGGTG  
AAGACATTGTGGCTGACCATGTTGCCTCCTATGGTGTGAACCTTACCAGTCTCACGGTCCCTCTGGCCA  
GTACACCCATGAATTTGATGGAGACGAGGAGTTCTACGTGGACCTGGAGACGAAAGAGACTGTCTGGCAG  
TTGCCTATGTTTAGCAAATTTATAAGTTTTGACCCGACAGTGCCTGAGAAATATGGCTGTGGGAAAAC  
ACACCTTGAATTCATGATGAGACAGTCCAACCTACCGCTGCCACCAATGAGGTTCTGAGGTCACAGT  
GTTTTCCAAGTTTCTGTGACGCTGGGTGAGCCCAACACCTCATCTGTCTTGTGGACAACATCTTTCT  
CCTGTGGTCAACATCACCTGGCTGAGCAATGGGCACTCAGTCACAGAAGGTGTTTCTGAGACCAGCTTCC  
TCTCCAAGAGTGATCATTCTTCTTCAAGATCAGTTACCTCACCTTCTCCCTTCTGCTGATGAGATTTA  
TGACTGCAAGGTGGAGCACTGGGGCCTGGACGAGCCTTCTGAAACACTGGGAGCCTGAGATCCAGCC  
CCTATGTCAGAGCTCACAGAGACTTTGGTCTGCGCCCTGGGGTTGTCTGTGGCCCTATGGGCATTGTGG  
TGGCACTGTCTCATCATCCAAGGCCTGCGTTTCAAGTGGTGTCTCCAGACACCAAGGGCTCTTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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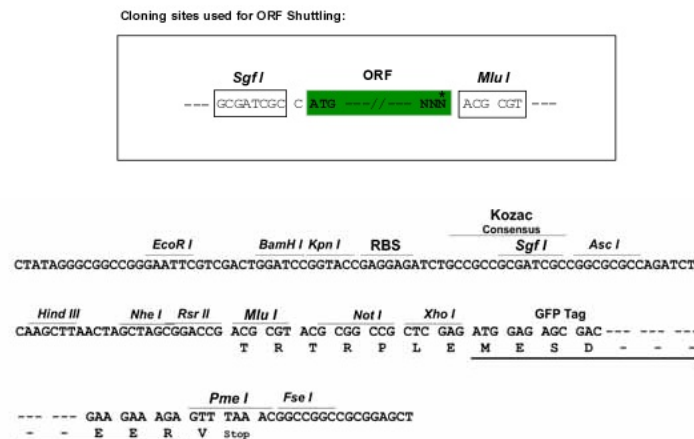
**Protein Sequence:** >RG223979 representing NM\_020056  
Red=Cloning site Green=Tags(s)

MILNKALLL GALALTAVMSPCGGEDIVADHVASYG VNFYQSHGPSGQYTHEFDGDEEFYVDLETKETVWQ  
 LPMFSKFI SFDPQSALRNMAVGKHTLEFMMRQSNSTAATNEVPEVTVF SKFPVTLGQPNTLICLDNIIFP  
 PVVNIITWLSNGHSVTEGVSETSFLSKSDHSFFKISYLTFLPSADEIYDCKVEHWGLDEPLLKHWEPEIPA  
 PMSELTETLV CALGLSVGLMGI VVGTVFIIQGLRSVGASRHQGLL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_020056

**ORF Size:** 765 bp

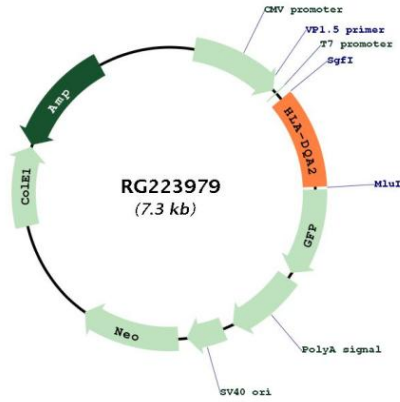
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_020056.2</a> , <a href="#">NP_064440.1</a>
<b>RefSeq Size:</b>	1709 bp
<b>RefSeq ORF:</b>	768 bp
<b>Locus ID:</b>	3118
<b>UniProt ID:</b>	<a href="#">P01906</a>
<b>Cytogenetics:</b>	6p21.32
<b>Domains:</b>	MHC_II_alpha, ig, IGc1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	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
<b>Gene Summary:</b>	This gene belongs to the HLA class II alpha chain family. The encoded protein forms a heterodimer with a class II beta chain. It is located in intracellular vesicles and plays a central role in the peptide loading of MHC class II molecules by helping to release the CLIP molecule from the peptide binding site. Class II molecules are expressed in antigen presenting cells (B lymphocytes, dendritic cells, macrophages) and are used to present antigenic peptides on the cell surface to be recognized by CD4 T-cells. [provided by RefSeq, Jun 2010]

Product images:



Circular map for RG223979