

HLA Class I and II Sequence Alignments

October 2008 update

The alignments and files provided here are based on release 2.23.0 of the [IMGT/HLA Sequence Database](#)

- [General Information on the HLA sequence alignments](#)
- [About this release](#)
Details of all changes since release 2.22.0
- [Map](#)
Access each gene's sequences and reference information via a map of genes in the human MHC region
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A single zipped archive of all the text alignments is available from the IMGT/HLA ftp server. Save [this](#).

To cite the database please use:

- Robinson J, Waller MJ, Parham P, de Groot N, Bontrop R, Kennedy LJ, Stoehr P and Marsh SGE
IMGT/HLA and IMGT/MHC: Sequence Databases for the study of the Major Histocompatibility Complex
Nucleic Acids Research, 31, 311-314, 2003.
Full Text available from [Nucleic Acids Research](#) or [Download PDF File](#)

Locus	Nucleotide Sequences				Peptide Sequences			References
HLA-A	Alignment	Genomic alignment	PIR	FASTA	Alignment	PIR	FASTA	HLA-A
HLA-B	Alignment	Genomic alignment	PIR	FASTA	Alignment	PIR	FASTA	HLA-B
HLA-C	Alignment	Genomic alignment	PIR	FASTA	Alignment	PIR	FASTA	HLA-C
HLA-E	Alignment	Genomic alignment	PIR	FASTA	Alignment	PIR	FASTA	HLA-E
HLA-F	Alignment	Genomic alignment	PIR	FASTA	Alignment	PIR	FASTA	HLA-F
HLA-G	Alignment	Genomic alignment	PIR	FASTA	Alignment	PIR	FASTA	HLA-G
HLA-H	Alignment	Genomic alignment	PIR	FASTA	-	-	-	HLA-H
HLA-J	Alignment	Genomic alignment	PIR	FASTA	-	-	-	HLA-J
HLA-K	Alignment	Genomic alignment	PIR	FASTA	-	-	-	HLA-K
HLA-L	Alignment	Genomic alignment	PIR	FASTA	-	-	-	HLA-L
HLA-P		Genomic alignment	PIR	FASTA	-	-	-	HLA-P
HLA-V	Alignment	Genomic alignment	PIR	FASTA	-	-	-	HLA-V
HLA-DRA	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DRA
HLA-DRB	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DRB
HLA-DQA	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DQA
HLA-DOB	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DOB
HLA-DPA	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DPA
HLA-DPB	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DPB
HLA-DMA	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DMA
HLA-DMB	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DMB
HLA-DOA	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DOA
HLA-DOB	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	HLA-DOB
MICA	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	MICA
MICB	Alignment	Genomic alignment	PIR	FASTA	Alignment	PIR	FASTA	MICB
TAP1	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	TAP1
TAP2	Alignment	-	PIR	FASTA	Alignment	PIR	FASTA	TAP2

Note that sequences with insertions and deletions are now included as part of the standard alignment. The numbering of nucleotides and codons is identical to the reference sequence for each locus.