

BACKGROUND

The human leukocyte antigen (HLA) system is a complex of genes on chromosome 6 in humans that encode cell-surface proteins responsible for regulation of the immune system. It is the most polymorphic region of the genome. To 2016, 14473 unique HLA alleles have been described in the IMGT/HLA database.

INTRODUCTION

To help establish an accurate assay for HLA typing, CB-Gene has launched HLA single-locus genotyping (4-digit HLA alleles) and HLA matching multi-locus genotyping (6-digit HLA alleles) standard products.

HLA single-locus genotyping standard

include mainly HLA-B typing, which have been verified by sanger sequencing and the gold standard PCR-SBT *method* recommended by WHO. Such products are relevant for the personalization of medicines, such as auxiliary diagnosis of ankylosing spondylitis (AS), medication guidance for gout and Stephen Johnson syndrome (SJS) caused by anti-epileptic drug carbamazepine, etc.

HLA matching multi-locus genotyping

standard cover a relatively complete set of 11 loci A、B、 C、DRB1/3/4/5、DPA1、DPB1、DQA1、DQB1 verified by third-generation sequencing, with ultra-high resolution typing, which can accurately confirm the typing sequence. This type of product plays a key role in *donor*recipient matching for bone marrow transplantation and other tissue and organ transplants such as liver and kidney. The HLA genotype matching degree of both donors and recipients significantly affects the long-term survival rate of the transplant recipients. The higher the degree of matching, the better., the higher the long-term survival rate.

Advantages

- CB-Gene launched HLA standard products have a human cell background, *better simulate clinical samples*, and have the advantages of *reproducibility*, sustainable and stable supply, and small batch-to-batch differences.
- ✓ CB-Gene has passed ISO90001 and ISO13485 dual system certification, and its product quality is undoubtedly.

Human Leukocyte Antigen Reference Standard

PRODUCT DATA

HLA single-locus genotype Reference Standard List

Catalog No.	Name	HLA-B genotype	Verification method	
CBPQ0001	HLA-B*27:04 Reference Standard	HLA-B*27:04	PCR-SBT/Sanger	
		HLA-B*40:01		
CBPQ0002	HLA-B*27:05 Reference Standard	HLA-B*27:05	PCR-SBT/Sanger	
		HLA-B*27:05	I CIX DD I/Daligei	
CBPQ0003	HLA-B*57:01 Reference	HLA-B*57:01	PCR-SBT/Sanger	
	Standard	HLA-B*57:01	r en ob r/bunger	
CBPQ0004	HLA-B*15:02 Reference	HLA-B*15:02	PCR-SBT/Sanger	
CDI QUUUT	Standard	HLA-B*58:01	I CR-5D1/5anger	
CBPQ0005	HLA-B*58:01 Reference Standard	HLA-B*15:02	PCR-SBT/Sanger	
		HLA-B*58:01	I CR-SD I/Sanger	
CBPQ0006	HLA-B*13:01 Reference	HLA-B*13:01	PCR-SBT/Sanger	
	Standard	HLA-B*13:01	I CIT DD I / Dullgor	

HLA matching multi-locus genotype Reference Standard List

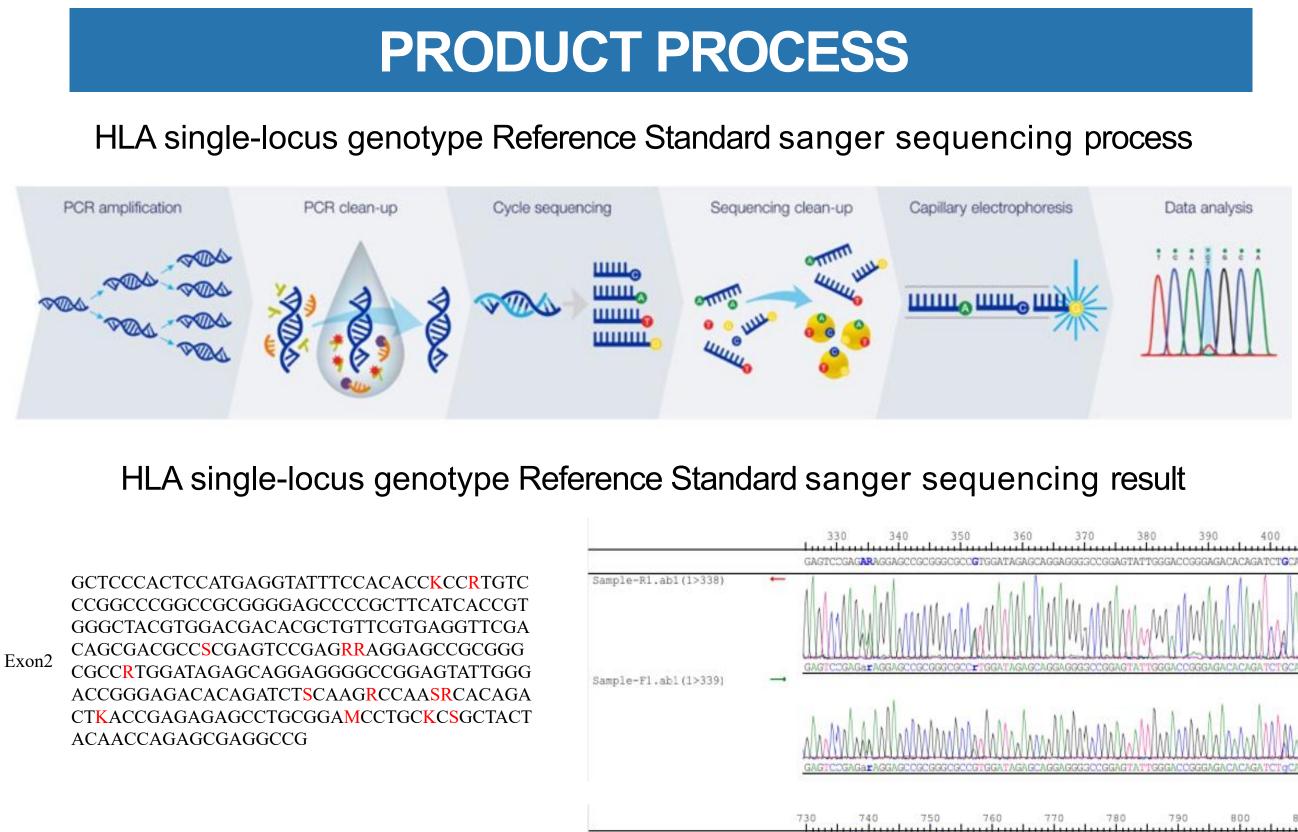
Catalog No.	HLA-A	HLA-B	HLA-C	HLA-DQA1	HLA-DQB1
Catalog 110.				IILA-DQAI	IILA-DQDI
	HLA-A*02:06:01	HLA-B*46:01:01	HLA-C*01:02:01	HLA-DOA1*03:01:01	HLA-DOB1*03:02:01
CBPQ0007	HLA-A*31:01:02	HLA-B* 40:02:01	HLA-C*03:04:01	HLA-DOA1*05:03:01	HLA-DOB1*03:01:01
	HLA-DPA1	HLA-DPB1	HLA-DRB1	HLA-DRB3/4/5	Verification method
	HLA-DPA1*02:02:02	HLA-DPB1*05:01:01	HLA-DRB1*14:03:01	HLA-DRB3*01:01:02	Third-generation
	HLA-DPA1*02:02:02	HLA-DPB1*02:01:02	HLA-DRB1*04:07:01	HLA-DRB4*01:03:01	sequencing
Catalog No.	HLA-A	HLA-B	HLA-C	HLA-DQA1	HLA-DQB1
	HLA-A*03:01:01	HLA-B* 56:01:01	HLA-C*01:02:01	HLA-DOA1*01:01:01	HLA-DOB1*05:01:01
	HLA-A*11:01:01	HLA-B* 44:02:01	HLA-C*05:01:01	HLA-DOA1*05:05:01	HLA-DOB1*03:01:01
CBPQ0008	HLA-DPA1	HLA-DPB1	HLA-DRB1	HLA-DRB3/4/5	Verification method
	HLA-DPA1*01:03:01	HLA-DPB1*02:01:02	HA-DRB1*12:01:01	HLA-DRB3*02:02:01	Third-generation
	HLA-DPA1*01:03:01	HLA-DPB1*03:01:01	HA-DRB1*01:01:01	TILA-DKD5 02.02.01	sequencing
Catalog No.	HLA-A	HLA-B	HLA-C	HLA-DQA1	HLA-DQB1
	HLA-A*26:01:01	HLA-B*48:01:01	HLA-C*08:01:01	HLA-DQA1*03:02:01	HLA-DQB1*05:03:01
	HLA-A*26:02:01	HLA-B*40:06:01	HLA-C*03:03:01	HLA-DQA1*01:04:01	HLA-DQB1*03:03:02

Catalog No.	HLA-A	HLA-B	HLA-C	HLA-DQA1	HLA-DQB1
	HLA-A*02:06:01	HLA-B*46:01:01	HLA-C*01:02:01	HLA-DOA1*03:01:01	HLA-DOB1*03:02:01
CBPQ0007	HLA-A*31:01:02	HLA-B* 40:02:01	HLA-C*03:04:01	HLA-DOA1*05:03:01	HLA-DOB1*03:01:01
	HLA-DPA1	HLA-DPB1	HLA-DRB1	HLA-DRB3/4/5	Verification method
	HLA-DPA1*02:02:02	HLA-DPB1*05:01:01	HLA-DRB1*14:03:01	HLA-DRB3*01:01:02	Third-generation
	HLA-DPA1*02:02:02	HLA-DPB1*02:01:02	HLA-DRB1*04:07:01	HLA-DRB4*01:03:01	sequencing
Catalog No.	HLA-A	HLA-B	HLA-C	HLA-DQA1	HLA-DQB1
CBPQ0008	HLA-A*03:01:01	HLA-B* 56:01:01	HLA-C*01:02:01	HLA-DOA1*01:01:01	HLA-DOB1*05:01:01
	HLA-A*11:01:01	HLA-B* 44:02:01	HLA-C*05:01:01	HLA-DOA1*05:05:01	HLA-DOB1*03:01:01
	HLA-DPA1	HLA-DPB1	HLA-DRB1	HLA-DRB3/4/5	Verification method
	HLA-DPA1*01:03:01 I	HLA-DPB1*02:01:02	HA-DRB1*12:01:01	HLA-DRB3*02:02:01	Third-generation
	HLA-DPA1*01:03:01 I	HLA-DPB1*03:01:01	HA-DRB1*01:01:01	11LA-DRD3 02.02.01	sequencing
Catalog No.	HLA-A	HLA-B	HLA-C	HLA-DQA1	HLA-DQB1
	HLA-A*26:01:01	HLA-B*48:01:01	HLA-C*08:01:01	HLA-DQA1*03:02:01	HLA-DQB1*05:03:01
	HLA-A*26:02:01	HLA-B*40:06:01	HLA-C*03:03:01	HLA-DQA1*01:04:01	HLA-DQB1*03:03:02

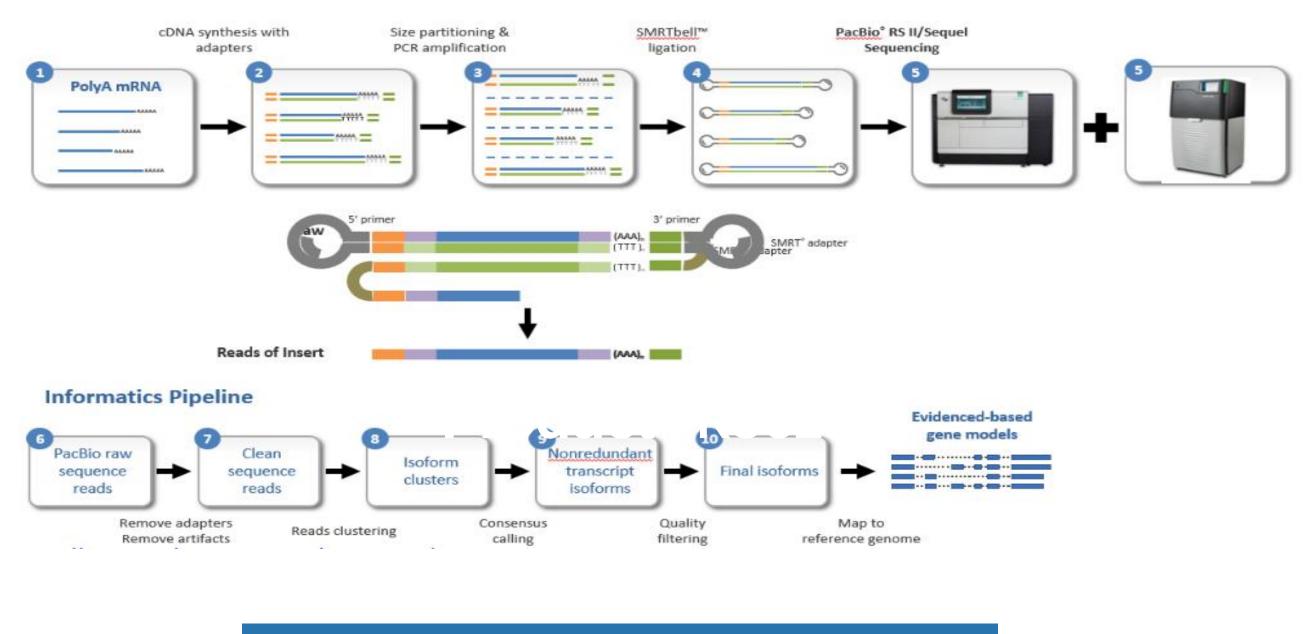
	Catalog No.	HLA-A	HLA-B	HLA-C
		HLA-A*26:01:01	HLA-B*48:01:01	HLA-C*08:01:01
		HLA-A*26:02:01	HLA-B*40:06:01	HLA-C*03:03:01
	CBPQ0010	HLA-DPA1	HLA-DPB1	HLA-DRB1
	HLA-DPA1*01:03:01	HLA-DPB1*02:01:02	HLA-DRB1*14:54:01	
		HLA-DPA1*01:03:01	HLA-DPB1*02:01:02	HLA-DRB1*09:01:02

Verification method HLA-DRB3/4/5 HLA-DRB3*02:02:01 Third-generation sequencing

02 HLA-DRB4*01:03:02



GGTCTCACACCCTCCAGARKATGTAYGG TGGGGCCGGACGGGCGCCTCCTCCGCGG CAGKACGCCTACGACGGCAAGGATTACA AACGAGGACCTGMGCTCCTGGACCGCC GGCGGCTCAGATCWCCCAGCGCAAGTK(CCCGTGWGGCGGAGCAGCTGAGAGCCT GGCGAGTGCGTGGAGTGGCTCCGCAGAT AACGGGAAGGASAMGCTGSAGCGCGCK(



HLA Reference products have been tested using sanger sequencing PCR-SBT or third-generation sequencing. By seguence-alignment with IMGT/HLA database sequence, we accurately confirm the genotypes of every sample.

Email:sales@cobioer.com Website:https://www.cobioer.com



CKCCRTGTC CATCACCGT GAGGTTCGA GCCGCGGG AGTATTGGG ASRCACAGA CKCSGCTACT	Sample-F1.ab1(1>339)	330 340 350 360 370 380 390 400 GAGTCCGAGARAGGAGCCGCGGGGCGCCGTGGATAGAGCAGGAGGGGCCCGGAGTATTGGGACCGGGAGACACAGATCTGCAA GAGTCCGAGA±AGGAGCCGCGGGGCGCC±TGGATAGAGCAGGAGGGGCCGGGAGTATTGGGACCGGGGAGACACAGATCTGCAA GAGTCCGAGa±AGGAGCCGCGGGCGCCGTGGATAGAGCAGGAGGGGCCCGGAGTATTGGGACCGGGAGACACAGATCTGCAA
GCTGCGACG GGYAYMAC ATCGCCCTG CGCGGACAC CGCGGACGCGG TACCTGGAG TACCTGGAG CG	HLA-B 270401.SEQ(1>1153) →	30 740 750 760 770 780 790 800 810 CCCTCCAGARKATGTAYGGCTGCGACGTGGGGCCGCGGGGGCGCCTCCTCOGCGGGGTAYCACCAGGACGCCTACGACGGCA CCCTCCAGAATATGTATGGCTGCGACGTGGGGCCGGGGGGGG

HLA matching multi-locus genotype Reference Standard sanger sequencing process

TEST PRINCIPLE

Contact us

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