

Human Random Control DNA Panels

Product Data Sheet



Product No: HRC-2 (2µg)

Distributed by:



Intended Use

ECACC Human Random Control (HRC) DNA Panels are intended as an aid to determining the characteristics of DNA from apparently normal, randomly selected subjects as a basis for comparison with DNA from subjects that have been selected for particular phenotypic characters. The DNA panels are designed for single use and can be used directly in automated gene analysis systems.

Description

HRC DNA is extracted from lymphoblastoid cell lines derived by Epstein Barr Virus (EBV) transformation of peripheral blood lymphocytes from fresh, single donor blood samples. The donors are all UK Caucasian and are characterised by gender and age at venesection. All donors have given written, informed consent for their blood to be used for research purposes.

The DNA is extracted and purified using standard techniques that yield high molecular weight material, as verified by agarose gel electrophoresis. The composition of each panel is completely defined and standardised so that each product lot will be identical. The identity of each product lot is checked using STR DNA profiling. Consequently ECACC HRC DNA Panels can be used as Reference Standard material as an aid to routine quality control in the laboratory.

Sample details

The table below provides the individual sample designation, sex (M = male F = female), and age of donor at venesection (e.g. 31yr) if known.

	1	2	3	4	5	6	7	8	9	10	11	12
A	C0871 M	C0006 M 30yr	C0781 M	C0968 M	C0085 M 37yr	C0921 M	C0084 M 49yr	C0854 M	C0154 F 56yr	C0868 M	C0098 M 27yr	C0124 M
B	C0030 M	C0010 M 28yr	C0203 M 45yr	C0920 M	C0091 M 41yr	C0137 M 33yr	C1010 M	C0851 M	C0880 M	C0106 M 24yr	C0123 M 49yr	C0001 M 34 yr
C	C0881 M	C0753 M	C0977 M	C0149 M 42yr	C0741 M	C0891 M	SG0125 M	C0755 F	C1011 M	C0882 M	C0850 M	C0052 M 30yr
D	C0047 M 39yr	C0874 M	C1008 M	C0883 M	C0018 M 36yr	C0848 M	C0832 M	C0055 M 42yr	C0060 M 37yr	C0731 M	C0886 M	C0738 M
E	C0724 F	C0723 F	C0015 F 32yr	C0730 F	C0191 F 27yr	C0959 F	C0139 F 39yr	C0180 F 49yr	C0892 F	C0958 F	C0178 F 50yr	C0967 F
F	C0894 F	C0002 M 34yr	C0201 F 29yr	C0160 F 49yr	C0994 F	C0197 F 48yr	C0895 F 39yr	C0186 F 30yr	C0728 F	C0016 F32yr	C0192 F 28yr	C0135 F 39yr
G	C0956 F	C0009 F 34yr	C0749 F 38yr	C0196 F 44yr	C0008 F 43yr	C0058 F 42yr	C0035 F	C0167 F 39yr	C0065 F 40yr	C0750 F	C0902 F	C0172 F 40yr
H	C0111 F	C0893 F	C0897 F	C0862 F	C0166 F 29yr	C0861 F	C0040 F 36yr	C0038 F 47yr	C0168 F 49yr	C0190 F 32yr	C0022 F	C0159 F 46yr

Amount and concentration of DNA

The DNA concentration is measured using the ds DNA Quantitation kit (Molecular Probes, USA) on a Fluoroskan Ascent fluorometer from Thermo Fisher Scientific (Type 374).

The DNA is dissolved in 10mM Tris (pH8) 1mM EDTA to preserve the quality of the DNA.

Total DNA per sample:	2µg
Concentration:	Target 100ng/µl Typical range +/- 10ng/µl
Recoverable volume:	20µl

Storage

ECACC DNA panels are supplied frozen to preserve quality and also to facilitate handling. On receipt, the panels should be stored at -80°C. The DNA panel presentation is intended for single use although, with care, repeat use is possible. After thawing, panels can be stored at 2-8°C for 6 months provided precautions are taken to prevent fluid loss by evaporation.

Repeated freeze-thawing cycles can damage the DNA and should be avoided.

Use of DNA Panels

Remove the panel from its polythene bag / packaging and make sure this Data Sheet is retained safely. Do not remove the foil seal.

Place the panel on a level surface, top uppermost and allow to thaw. Centrifuge the plate to force all the fluid to the bottom of the well. Do not remove the foil seal until these precautions have been observed.

Important - If it is not possible to centrifuge the plates then the foil seal must be removed immediately after removal from freezer storage. (If the plate is allowed to thaw, liquid may condense on the underside of the foil seal.)

Alternatively the foil seal may be pierced using a sharp point to allow access to micropipette tips. This approach minimises the risk of cross contamination associated with the action of peeling off the foil seal.

Use a micropipette to withdraw the required amount of DNA solution from the panel.

Warnings and Precautions

Avoid cross contamination between different samples comprising a panel. Do not repeatedly use the same foil seal. Remove adhesive sealers with care. Use clean pipette tips for each specimen. The master cell banks used to prepare the DNA extracts are taken from "low risk" normal blood donors. However it is recommended that standard laboratory precautions for handling potentially infectious material should be employed.

Limitations of Use

ECACC DNA Panels are intended for research use only.