

Human Random Control DNA Panels

Product Data Sheet



Product No: HRC-1 (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	C0906 M	C0722 M	C0904 M	C0744 M	C0007 M 55yr	C0937 M	C0960 M	C0858 M	C0053 M 53yr	C1006 M	C0901 M	C0908 M
B	C0066 M 32yr	C0147 M 39yr	C0029 M	SG0121 M	C0748 M	C0864 M	C0766 M	C0863 M	C0107 M 33yr	C0907 M	C0108 M 36yr	C0888 M
C	C0156 M 50yr	C0207 M	C0208 M	C0735 M	C0034 M	C0152 M 32yr	C0855 M	C0849 M	C0941 M	C0909 M	C0143 M 33yr	C0202 M 35yr
D	C0100 M 42yr	C0088 M 34yr	C0856 M	C0150 M 43yr	C0157 M 28yr	C0121 M 42yr	C0996 M	C0938 M	C0917 M	C0068 M 35yr	C0090 M 61yr	C0739 M
E	C0182 F 39yr	C0045 F 25yr	C0210 F	C0027 F	SG0042 F	C0884 F	C0870 F	C0204 F	C0857 F	C0073 F 31yr	C0878 F	C0184 F 43yr
F	C0140 F 40yr	C0961 F	C0188 F 31yr	C0194 F 37yr	C0896 F	C0899 F	C0939 F	C0940 F	C0953 F	C0969 F	C0877 F	C0195 F 38yr
G	C0786 F	C0126 F 24yr	C0215 F	C0747 F	C0898 F	C0080 F 40yr	C0081 F 40yr	C0145 F 31yr	C0185 F 50yr	C0187 F 37yr	C0097 F 28yr	C0978 F
H	C0136 F 36yr	C0095 F	C0189 F 38yr	C0997 F	C0036 F 26yr	C0096 F	C0063 F 46yr	C0725 F	C0176 F 38yr	C0183 F 54yr	C0913 F	C0075 F 35yr

Amount and concentration of DNA

The DNA concentration is measured using the dsDNA 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:	Minimum of 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.