

Human Random Control DNA Panels

Product Data Sheet

Manufactured by:



Product No: HRC-4 (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.

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 (if known). 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.

	1	2	3	4	5	6	7	8	9	10	11	12
A	C0963 M	C0971 M	C0976 M	C0981 M	C0983 M	C0988 M	C0995 M	C2012 M	C2013 M	C2018 F	C2020 F	C2021 M
B	C2022 M	C2023 M	C2025 M	C2026 M	C2027 M	C2039 M	C2046 F	C2048 M	C2070 M	C2071 F	C2074 M	C2081 F
C	C2085 F	C2089 F	C2091 F	C2093 F	C2102 M	C2103 M	C2108 M	C2109 M	C2113 M	C2114 F	C2116 F	C2118 F
D	C2119 M	C2120 F	C2121 F	C2122 F	C2125 M	C2127 M	C2130 M	C2132 F	C2135 F	C2139 M	C2143 M	C2144 F
E	C2146 F	C2148 M	C2151 M	C2156 M	C2158 M	C2159 M	C2160 M	C2161 M	C2172 F	C2176 F	C2179 M	C2180 F
F	C2182 M	C2183 F	C2184 F	UKTS 8049 M	UKTS 8670 M	UKTS 8754 F	C2191 F	UKTS 8695 F	UKTS 8791 M	UKTS 8792 F	UKTS 8796 M	UKTS 8797 M
G	UKTS 8837 M	C2174 M	UKTS 8992 M	C2142 M	UKTS 8740 M	UKTS 8768 F	UKTS 9019 M	UKTS 8966 M	UKTS 9110 F	UKTS 9109 F	UKTS 8713 M	UKTS 9074 M
H	UKTS 9114 F	C2072 M	UKTS 8989 M	UKTS 9002 M	UKTS 9051 M	UKTS 9003 M	UKTS 9020 M	UKTS 9025 M	UKTS 9046 M	UKTS 9201 M	UKTS 9225 M	UKTS 9260 M

Amount and concentration of DNA

The DNA concentration is measured using the NanoDrop 1000 spectrophotometer.

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
Minimum 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, panel 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 Panel

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.