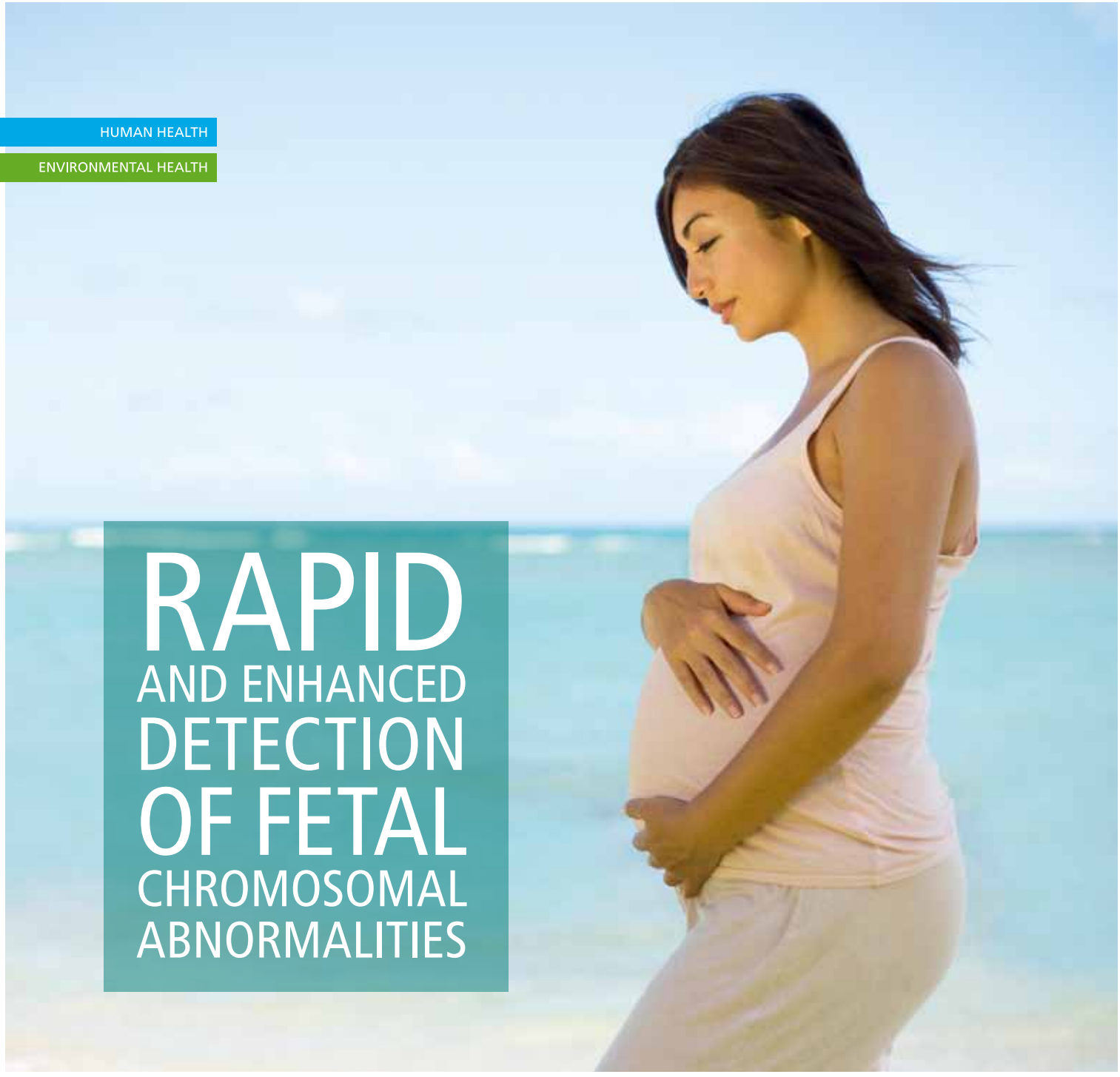
HUMAN HEALTH

ENVIRONMENTAL HEALTH



RAPID AND ENHANCED DETECTION OF FETAL CHROMOSOMAL ABNORMALITIES

PRENATAL BoBs™

Part of the BACs-on-Beads™ product family

Available in EU countries and Australia. Unavailable in non-listed countries.

PerkinElmer®
For the Better

WHAT IS PRENATAL BoBs™?

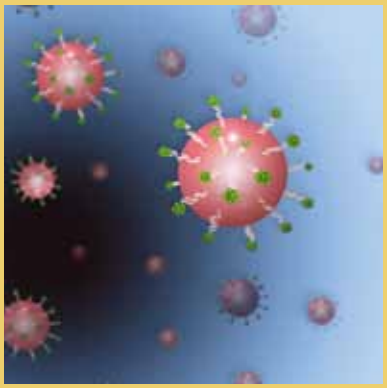
Prenatal BoBs™ is a BACs-on-Beads™ product designed for rapid detection of gains and losses of DNA.
By utilizing 83 PCR-amplified BAC clones attached to encoded beads, the proprietary BACs-on-Beads technology enables molecular karyotyping in a well. In addition to detecting copy number changes of chromosomes 13, 18, 21, X and Y, the product enables detection of 9 additional chromosomal regions in which a clear correlation between a loss and an adverse outcome has been demonstrated. This multiplex assay includes five markers for aneuploidy detection of chromosomes 13, 18, 21, X and Y and 4 to 8 independent markers for each of the additional target regions.

Analysis may be performed on minute amounts of genomic DNA extracted directly from amniotic fluid or CVS and results are obtained in less than 24 hours.

The Prenatal BoBs kit contains the multiplex encoded microsphere probe set, sample labeling reagents, hybridization reagents, wash reagents, and reporter reagents. The signals generated by the kit are read by the Luminex® 200™ instrument system and analyzed with the BoBsoft™ analysis software. The kit contents are sufficient for 96 reactions.

83 BAC probes are used in the Prenatal BoBs™ panel: 5 for each chromosome 13, 18, 21, X and Y; 4 to 8 each for nine well-defined target loci; and 6 autosomal controls. Two 70-base oligonucleotides selected to have no homology to the human genome are used for background subtraction.

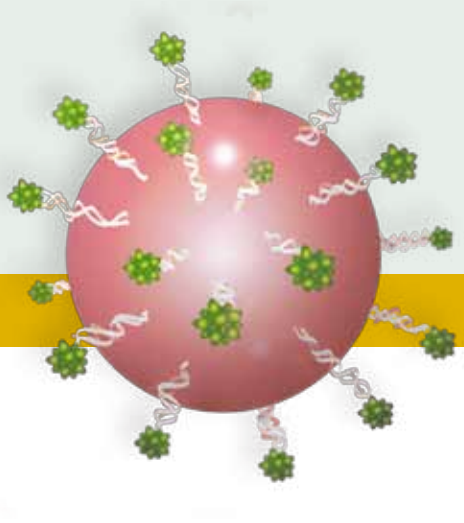
In Prenatal BoBs the panel of BACs is selected such that generally the entire region of 4 – 8 probes will deflect together if a gain or a loss has occurred in the probed regions.



Gains / losses associated with:

- **Chromosomes 13, 18, 21, X and Y**
- **DiGeorge syndrome**
- **Williams-Beuren syndrome**
- **Prader-Willi syndrome**
- **Angelman syndrome**
- **Smith-Magenis syndrome**
- **Wolf-Hirschhorn syndrome**
- **Cri du Chat syndrome**
- **Langer-Giedion syndrome**
- **Miller-Dieker syndrome**

PRENATAL BoBs™



Detection of chromosomal gains and losses in 9 common microdeletion syndrome regions in addition to the most common aneuploidies

PerkinElmer now offers a new product, Prenatal BoBs™. This BACs-on-Beads™ based multiplex assay is designed to detect aneuploidies of chromosomes 13, 18, 21, X and Y, as well as gains and losses in 9 common microdeletion syndrome regions. Prenatal BoBs is a simple, robust assay that offers significant benefits in terms of ease of use, minute sample volumes, reduced time-to-result and improved pick-up rates for today's cytogenetics and molecular genetics laboratories.

Incidence in live births

X chromosome abnormalities (X0, XXX, XXY)	1:400
Trisomy 21	1 : 800
Trisomy 18	1 : 6 000
Trisomy 13	1 : 10 000
Prenatal BoBs microdeletion panel	1 : 1 600

Improved detection

For fast, precise and cost-effective targeted molecular karyotyping.

- **Results in less than 24 hours**

Complete procedure from sample to result takes less than 24 hours, allowing your laboratory to obtain results the following day.

- **Quick and easy implementation**

The prenatal BoBs reagents are provided in a single kit.

- **Cost-efficiency**

Tens of samples can be run simultaneously reducing the hands-on time required.

- **Easy interpretation**

With excellent coverage of each target region, both male and female references and the intuitive BoBsoft™ analysis software results are clear and easy to interpret.

- **More information**

By targeting copy number changes of chromosomes 13, 18, 21, X and Y, and also 9 additional microdeletion syndrome target regions, Prenatal BoBs will enable detection of gains and losses that could easily be missed with other commonly used methods.

All PerkinElmer diagnostic products may not be available in all countries.
For information on availability please contact your local representative.

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
Phone: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com

PerkinElmer, Inc.
Wallac Oy
PO Box 10
20101 Turku, Finland
Phone: + 358 2 2678 111
Fax: + 358 2 2678 357

PerkinElmer®

For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

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