INSTRUCTIONS FOR USE

Rons™ Human COT I DNA

List of Components	Quantity REF 402000	REF 402007	REF 402011
Rons™ Human COT I DNA	bulk	500 µg	1 ml

IFU valid from	**November 2026**
IFU reviewed	**November 2026**

BIORON GmbH – In den Rauhweiden 20 – 67354 Römerberg - Germany
Phone:+49623229845-0 - Fax:+49623229845-29
info@bioron.net www.bioron.net

Introduction

Rons™ Human COT I DNA is a human genomic DNA preparation enriched in repetitive sequences. It is used as a blocking reagent in hybridization-based molecular workflows to reduce non-specific hybridization caused by repetitive genomic sequences and thus to support target-specific hybridization.

Applications

COT I Human DNA is intended for use by qualified laboratory personnel as a hybridization blocking reagent. Typical applications include:

- Fluorescence in situ hybridization (FISH)
- Hybridization-based NGS workflows
- Cytogenetics
- Chromosomal and genomic analysis, including chromosomal microarray analysis (CMA) and other microarray applications
- Reduction of cross-hybridization and use as blocking reagent in other genomic hybridization procedures

Principle of the method

COT I Human DNA is purified from human placental tissue by DNA extraction followed by fragmentation. It has an average fragment size distribution of 30 – 300 bp and is supplied in 1x TE buffer.

Repetitive sequences are distributed throughout the human genome and can cause non-specific hybridization during genomic hybridization procedures. As Rons™ Human COT I DNA is enriched in these repetitive sequences, it suppresses hybridization to repetitive genomic regions. This reduces background hybridization and supports the specific detection of target sequences.

Product Specifications

Parameter		Specification
Composition		COT I Human DNA (human genomic DNA from male placental tissue)
Concentration	REF 402000	Customized
	REF 402007	1.1 – 2.0 mg/ml (photometric measurement)
	REF 402011	1.1 – 1.5 mg/ml (fluorometric measurement)
Fragment size		30 – 300 bp (average size distribution)
Appearance		Clear, colourless to faintly tinted solution
Quality control		Each lot is tested for identity, DNA concentration, fragment size distribution and purity. A lot is released only if all predefined acceptance criteria are met.

Product use limitations

- COT I Human DNA is a hybridization blocking reagent and does not provide a diagnostic result on its own.
- Performance may vary depending on assay design, probe composition, sample quality and hybridization conditions.

Warning and precautions

- For use only by trained laboratory personnel familiar with molecular biology and hybridization-based procedures.
- The product is of human origin. Handle the product and all materials that come into contact with it as potentially infectious and in accordance with applicable biosafety regulations.
- Wear appropriate personal protective equipment (laboratory coat, gloves and eye protection).
- Avoid microbial contamination of the product, reagents and samples as well as cross-contamination between samples, reagents and work areas, as contamination may affect performance.
- Do not use the product if leakage, visible contamination, unusual turbidity, precipitation, discolouration or container damage is observed, or if the product has been exposed to conditions outside the recommended storage conditions.
- Do not use the product beyond the expiration date and use it only for the intended purpose described in these instructions for use.

Transportation & Storage

- The product is shipped on dry ice or frozen gel packs (blue ice), depending on destination, transit time and environmental conditions. The recommended storage temperature is maintained during shipment.
- Inspect the package upon receipt and report any damage, leakage or temperature excursion before use. Transfer the product immediately to the recommended storage conditions.
- Protect the product from direct sunlight and physical damage.
- Avoid repeated freeze-thaw cycles.

Storage	Temperature and Conditions
Long Term	-18 °C to -22 °C
Short Term	+2 °C to +8 °C
Shelf Life	24 months from date of manufacture

BIORON GmbH – In den Rauhweiden 20 – 67354 Römerberg - Germany
Phone:+49623229845-0 - Fax:+49623229845-29
info@bioron.net www.bioron.net

Symbol	Meaning	Symbol	Meaning
REF	Catalogue number	LOT	Batch code
	Temperature limit		Follow the instructions for use
	Manufacturer		Use-by date
	Date of manufacture		Contains sufficient for <n> tests
	Caution		Keep away from sunlight

BIORON GmbH – In den Rauhweiden 20 – 67354 Römerberg - Germany
Phone:+49623229845-0 - Fax:+49623229845-29
info@bioron.net www.bioron.net