

## TECHNICAL SHEET IDYLLA™ THYROIDPRINT® ASSAY (RUO)



The Idylla™ ThyroidPrint® Assay is a qualitative, multi-variate, reverse transcription polymerase chain reaction (RT-PCR)-based assay with real-time detection. The Assay assesses a gene expression profile from a fine needle aspirate (FNA) sample, that is collected from an indeterminate thyroid nodule (Bethesda III/IV). This reports a gene expression classifier score based on 10 target genes. The Idylla™ ThyroidPrint® Assay procedure has been optimized for FNA samples collected and stored in ThyroidPrint® Collection Buffer. The Idylla™ ThyroidPrint® Assay covers the entire process from sample to result, including fully integrated sample preparation, nucleic acid extraction, reverse transcription of RNA, real-time PCR amplification and detection, data analysis, and result reporting as applicable.

### FEATURES

The Idylla™ ThyroidPrint® Assay measures gene expression levels in 10 epithelial and stromal cell target genes relative to two reference genes listed in the table below.

#### Expressed Genes Detected by Idylla™ ThyroidPrint® Assay (RUO).\*

Gene Name	Gene Name Abbreviation	Chromosome # Transcript ID Number	Gene Function and Role
C-X-C motif chemokine receptor 3	CXCR3	Chromosome X ENST00000373693.4	Tumor Inflammatory Microenvironment Target Genes
C-X-C motif chemokine ligand 10	CXCL10	Chromosome 4 ENST00000306602.3	
C-C motif chemokine receptor 7	CCR7	Chromosome 17 ENST00000246657.2	
Coxsackie virus and adenovirus receptor	CXADR	Chromosome 21 ENST00000284878.12	
C-C motif chemokine receptor 3	CCR3	Chromosome 3 ENST00000395940.3	
Keratin 19	KRT19	Chromosome 17 ENST00000361566.7	Tumor Epithelial Target Genes
Claudin 1	CLDN1	Chromosome 3 ENST00000295522.4	
TIMP metalloproteinase inhibitor 1	TIMP-1	Chromosome X ENST00000218388.9	
Actin Filament Associated Protein 1 Like 2	AFAP1L2	Chromosome 10 ENST00000304129.9	
Heme oxygenase 1	HMOX-1	Chromosome 22 ENST00000216117.9	

## Expressed Genes Detected by Idylla™ ThyroidPrint® Assay (RUO).\* (continued)

Gene Name	Gene Name Abbreviation	Chromosome # Transcript ID Number	Gene Function and Role
ERCC excision repair 3	ERCC3	Chromosome 2 ENST00000285398.7	Reference Genes
Glucuronidase beta	GUSB	Chromosome 7 ENST00000304895.9	

\*Gonzalez et al., A 10-Gene Classifier for Indeterminate Thyroid Nodules: Development and Multicenter Accuracy Study. *Thyroid*, 2017

The relative weight of the expression value of each target gene is calculated by using the Idylla™ ThyroidPrint® Assay specific software generating a gene signature composite score. The score is reported either as 'High' or 'Low' based on a pre-set cut-off value within the software. A 'High' score is indicative of an atypical gene expression in the investigated target genes, while a 'Low' score is indicative of a normal gene expression.

### Specimen requirements

Sample type FNA sample (maximum volume of 300 µL) collected from a thyroid nodule which has been previously reported to be indeterminate (Bethesda III and IV (International), Thy3a and Thy3f (UK), TIR3A and TIR 3B (Italian))

### Total turnaround time

Time Approx. 160 minutes

### Catalog number

Idylla™ ThyroidPrint® Assay TP0011/6



Idylla™ ThyroidPrint® Assay is for Research Use Only (RUO), not for use in diagnostic procedures. The Assay is developed by GeneProDX and distributed by Biocartis. Idylla™ platform is CE-marked IVD in Europe and many other countries. Idylla™ is available for sale in Europe, the US and many other countries. Please check availability with a Biocartis representative. Biocartis and Idylla™ are registered trademarks in Europe, the US and many other countries. The Biocartis and Idylla™ trademarks and logos are used trademarks owned by Biocartis. © 2023, Biocartis NV. All rights reserved.