

<b>Target Gene Expression</b>	
<b>Service Title</b>	Taqman TM Gene Expression
<b>Workflow Code</b>	PCR-TAQ
<b>Short Service Description</b>	Analyse gene regulation / expression in a quantitative fashion using customised or inventoried gene expression panels.
<b>Base Price (Price per unit)</b>	Price on enquiry
<b>Turn Around Time</b>	1 working day(per 768 reactions post delivery of samples and reagents)
<b>Detailed Description and background</b>	
<p>TaqMan® Gene Expression Assays consist of a pair of unlabelled PCR primers and a TaqMan® probe with a FAM™ or VIC® dye label and minor groove binder (MGB) moiety on the 5' end, and non-fluorescent quencher (NFQ) dye on the 3' end. RNA from samples of interest is reverse transcribed into cDNA, and the synthesized cDNA serves as the template for real-time PCR.</p>	
<b>Service Details</b>	
<p>Taqman assays are purchased singularly for each gene under investigation. Each assay is able to perform up to 250 reactions. 19 species have been represented in over 1,200,000 pre-designed TaqMan® Assays. Customized assays can be developed to study any gene or splice variant in any organism. The workflow includes a reverse transcription step whereby the ABI High Capacity RNA-to-cDNA Kit provides high quality reverse transcription that delivers a streamlined workflow with maximum sensitivity and dynamic range. This is followed by the master mix preparation designed to exceed the performance of standard master mixes, (&lt;40 minutes) and finally real-time quantitative PCR on the 7900HT utilizing the 384-well plate format and offering optional fast real-time PCR capability. Acknowledged as the gold standard in real-time PCR, the 7900HT System at the CPGR combined with TaqMan® Genomic Assays enables you to achieve unprecedented throughput and flexibility, allowing you to pursue projects beyond the scope of previous real-time instruments.</p>	
<b>Service Deliverable</b>	
<p>Report includes the QC quality gate results, the raw data and an analysis report. Bioinformatic analysis and interpretation of data is optional.</p>	
<b>Sample/Info Submission Info</b>	
<p>From 1 to 384 reactions may be processed in a single run on each 384 well plate. Each assay kit is able to perform up to 250 reactions and each sample is run in triplicate or quadruplicate together with a standard curve, (if not pursuing the <math>\Delta\Delta CT</math> quantitative method). The concentrations of RNA per sample required is a minimum of 150ng in 10uL for effective cDNA synthesis for 80-100 reactions. RNA must be proven good quality(bioanalyzer trace) and 260/280 and 260/230 ratios between 1.8 and 2.1.</p>	
<b>Pricing Details</b>	Price on request
<b>Key Words</b>	gene expression. Taqman assay. qPCR. RT-PCR. Genomic DNA. Pathway analysis. RNA. cDNA
<b>Sample Shipping Address</b>	Institute of Infectious Disease and Molecular Medicine, UCT, Faculty of Health Sciences, Wernher and Beit Building, Level 2, Lab S2.09, Anzio Road, Observatory, Cape Town 7925, South Africa
<b>Related services</b>	Bioinformatics. Sample Preparation