

Epistem announces the successful evaluation of new RNA-Amp™ (RNA-amplification) technology

Epistem Holdings Plc (LSE: EHP), the Personalised Medicine and Biotechnology company, announces today the successful evaluation of RNA-Amp[™] for single cell expression profiling. The results have been published in BMC Genomics (Rothwell *et al.* (2014). **15**:1129) and compare amplified cDNA derived from three RNA-Amplification kits (Miltenyi µMACS[™], NuGEN Ovation[®] One-Direct and Epistem RNA-Amp[™]). The authors concluded that Epistem's RNA-Amp[™] kit exhibited the highest sensitivity and reproducibility. In addition, Affymetrix microarray data demonstrated that cDNA generated from single cells using Epistem RNA-Amp[™] produced faithful representative cDNA relative to unamplified reference controls. Strong platform correlations were also reported following the assessment of RNA-Amp[™] cDNA by RNA-Seq and high density qPCR. Using RNA-Amp[™] amplified material, the authors were able to identify transcriptional differences in cancer initiating cells (CICs) following RNA-Seq analysis. The authors concluded that the combined results confirmed the sensitivity and reproducibility of the Epistem RNA-Amp[™] technology for profiling in small cell populations.

Epistem's RNA-Amp[™] technology is a highly sensitive and reproducible method to derive cDNA from picogram to nanogram quantities of RNA. RNA-Amp[™] can be used with samples containing extracted RNA or performs well with samples directly, without the need for RNA isolation. The amplified cDNA derived from Epistem kits is platform agnostic and can be used in conjunction with a range of instrument manufacturer's microarray, RT-qPCR and Next Generation Sequencing products. Epistem will be presenting the RNA-Amp[™] technology at the Molecular Medicine Tri-Conference in San Francisco 15-20th February.

Matthew Walls, Epistem CEO commented; "We are delighted with the results of the evaluation study which alongside our existing internal applications in biomarker discovery and key gene regulation, opens up the possibility of producing RNA Amp[™] in a kit form for Next Generation Sequencing"

For further details please contact Epistem at www.epistem.co.uk or email info@epistem.co.uk. Epistem Plc

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Notes for editors

Epistem is a biotechnology company commercialising its expertise in stem cells in the areas of infectious and epithelial disease (oncology, gastrointestinal and dermatological). Epistem develops innovative therapeutics, biomarkers and diagnostics (Genedrive[®]) alongside contract research services to drug development companies. Epistem operates three divisions, Personalised Medicine (Pharmacogenomics and Diagnostics), Contract Research Services and Novel Therapies.