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Hsa-miR-194 Probe

Catalog No. FM194-25
Description: one vial of 0.3 mL of probe in hybridization buffer

Intended Use:
This probe is intended for research use only.

Principle:
MicroRNAs (miRNAs) are endogenous, non-coding small RNA molecules that play important role in controlling gene expression. They are involved in multiple biological functions and disease progression including cancer. miRNAs either act as tumor suppressors or oncogenes depending on function of their target gene. Aberrant expression of miRNA has been reported in different cancer types; hence, *in situ* detection of miRNA provides important insight for diagnosis, prognosis, and disease management. miR-194 is expressed in liver parenchymal cells, in preventing liver cancer cell metastasis. It is expressed in human gastrointestinal tract. miR-194 may have a role in gastric cancer invasion and progression. Expression of miR-194 is upregulated in breast cancer tissues compared to normal tissues. miR-194 plays a role in the activation of stellate cells during liver fibrogenesis. In the small intestine, miR-194 is induced during intestinal epithelial cell differentiation. Additionally, miR-194 is an epithelial cell-specific marker in the liver and plays a role in EMT and HCC metastasis.

Please visit the following link for more information about Hsa-miR-194. https://www.ncbi.nlm.nih.gov/gene/406969

Summary and Explanation
miRNAs play an important role in many biological processes, including differentiation and development, cell signaling, and response to infection. Recent research have shown that human miRNA genes are frequently located in cancer-associated genomic regions, while perturbed miRNA expression patterns have been observed in many human cancers. A number of oncogenes and tumor suppressor genes were found to be the targets of miRNAs and global miRNA expression signatures were able to distinguish cancerous and non-cancerous tissues. Therefore, miRNA profiles can serve as highly specific markers for diagnosis, prognosis, disease monitoring, as well as prediction of therapeutic response. miRNAs are remarkably stable molecules and are well preserved in formalin-fixed, paraffin-embedded (FFPE) as well as frozen specimens. Early diagnosis, detection, and assessment of the disease progression are essential for disease management, especially in tumor patients, where timely therapeutic interventions are extremely critical.

Quality Control
This product is quality control tested at BioGenex according to the suggested procedure. The recommended positive control tissue(s) for this miRNA probe are TCC and breast (FB-HM194).

Recommended protocol and parameters for Hsa-miR-194 probe
Automated Protocol:
https://omicsveu.com/wp-content/uploads/Brochures/914-0071.0.pdf
Manual Protocol:
https://omicsveu.com/wp-content/uploads/Brochures/914-0072.0.pdf
For more information:
https://omicsveu.com/wp-content/uploads/Brochures/914-0073.0.pdf

Bibliography
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	Temperature Limitation	RUO	For Research Use Only
	Use By Date	LOT	Batch Code
	Non-Sterile		Consult Instructions for Use
REF	Catalogue Number		BioGenex

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