48810 Kato Road, Suite 100E & 200E
Fremont, CA 94538, USA
Tel : +1 (800) 421-4149

Hsa-miR-204 Probe

Catalog No. FM204-25
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-204 plays an important role as a regulator in cell differentiation, apoptosis, stress response, inflammation, retina, lens development, and maintenance of axonal structure and function. Additionally, it is known to play an important role in smooth muscle calcification, regulation of carcinogenesis in peripheral nerve sheath tumors, and migration and invasion of endometrial cancers. Studies on the expression profile of miR-204 indicate a downregulation in prostate, and kidney cancers. Expression analysis of miR-204 might help in the diagnosis of the above said cancers for better prognosis and treatment.

Please visit the following links for more information about hsa-miR-204. http://www.ncbi.nlm.nih.gov/gene/406987

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 is breast (FB-HM204).

Recommended protocol and parameters for Hsa-miR-204 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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8°C / 2°C	Temperature Limitation	RUO	For Research Use Only
	Use By Date	LOT	Batch Code
NON STERILE	Non-Sterile		Consult Instructions for Use
REF	Catalogue Number		BioGenex

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Fremont, CA 94538, USA
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Contact: customerservice@omicsveu.com

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