

DATA SHEET
Hsa-miR-let-7a Probe

Catalog No. Description

HM007A-100 One vial of 0.650 ml of probe in hybridization buffer

Analyte Specific Reagent. Analytical and performance characteristics are not established.

Doc. No. 932-HM007A-100

Rev : D

Date of release: 10-Aug-2020

Description

The Hsa-miR-let-7a probe has been designed from mature human miR-let-7a sequence. This fluoresceinated probe is provided in a hybridization buffer for localization of miRNA in FFPE tissue by *In Situ* hybridization.

Specifications

The Hsa-miR-let-7a identifies mature miR-let-7a sequences in formalin-fixed, paraffin-embedded human tissues and/or freshly prepared frozen tissues by *in situ* hybridization. This probe does not react with normal human mRNA or nuclear DNA present in tissues.

Storage and Handling

Store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. The reagent must be brought to room temperature before use. (Important! The presence of precipitates induces background staining).

Precautions:

For professional use. The probe contains formamide. Formamide is classified as a teratogen. Pregnant workers should keep exposure to a minimum. Avoid inhalation, ingestion, and contact with unprotected skin. If skin contact occurs, wash thoroughly with soap and water. For more information, refer to the Material Safety Data Sheet, which is available upon request.

Quality Control

Each lot of this micro RNA probe is tested by *In Situ* hybridization for Quality Control purposes. Refer to the BioGenex Quality Control Testing Conditions table for additional information.

References

- Lorio MV and Croce CM. (2012). MicroRNA dysregulation in cancer: diagnostics, monitoring and therapeutics. A comprehensive review. *EMBO Mol Med* 4, 143–159.
- Chen PS, Su JL, and Hung MC. (2012). Dysregulation of Micro RNAs in cancer. *Journal of Biomedical Science*, 19:90.
- Nuovo GJ. (2008). In situ detection of precursor and mature microRNAs in paraffin embedded, formalin fixed tissues and cell preparations. *Methods* 44,39–46.
- Song R. et al. (2010). *In situ* hybridization detection of microRNAs. *Methods Mol Biol.* 629, 287-94.
- He XY, Chen JX, Zhang Z, Li CL, Peng QL and Peng HM: The let-7a microRNA protects from growth of lung carcinoma by suppression of k-Ras and c-Myc in nude mice. *J Cancer Res ClinOncol* 136: 1023-1028, 2010
- Julia Schultz et al., MicroRNA *let-7b* targets important cell cycle molecules in malignant melanoma cells and interferes with anchorage-independent growth *Cell Research* 2008;18:549-557
- Park S.M. et al., *Let-7* prevents early cancer progression by suppressing expression of the embryonic gene HMGA2. *Cell Cycle* 2007; 6:2585-2590
- Takamizawa, J., et al.,. Reduced expression of the let-7 microRNAs in human lung cancers in association with shortened postoperative survival. *Cancer Res.* 2004; 64:3753–3756.

BioGenex Quality Control Testing Conditions

Parameter	Conditions used
Control Tissue	PROSTATE, INTESTINE, PANCREASE (FB-HM007A)
Tissue Type	Formalin-fixed, paraffin-embedded cancer tissues