BioGenex
Accelerating the pace of precision medicine

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DATA SHEET

Beta Actin Probe

Catalog No.	Description
PR1055-100	0.650 ml fluoresceinated oligonucleotide Beta Actin probe

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

Doc. No. 932-PR1055-100; Rev. No. C
Date of release: 24-Jul-2024

REAGENT SUPPLIED

1 x 0.650 ml of pre-diluted fluoresceinated oligonucleotide Beta Actin probe in hybridization solution.

STORAGE AND HANDLING

Store the probe at 2-8° C. Warm to room temperature immediately prior to use.

SPECIFICATIONS

The oligonucleotide probe detects human Beta Actin mRNA in formalin-fixed, paraffin-embedded human tissues by *in situ* hybridization.

DESCRIPTION

The Beta Actin probe detects Beta Actin-encoded RNA in formalin-fixed, paraffin-embedded human tissues by in situ hybridization. Beta Actin-encoded RNA, remains a widely used housekeeping gene internal control for human FFPE tissues. However ACTB is closely associated with a variety of cancers and accumulating evidence indicates that ACTB is de-regulated in liver, melanoma, renal, colorectal, gastric, pancreatic, esophageal, lung, breast, prostate, ovarian cancers, leukemia and lymphoma. The detection of Beta Actin mRNA with BioGenex automated in situ hybridization technique will provide evidence of intact mRNA in tissues.

QUALITY CONTROL

For Quality Control purpose, each lot of this probe is tested by *in situ* hybridization using formalin-fixed, paraffin-embedded tonsil as control tissue.

PRECAUTIONS:

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

REFERENCES

1. Erber WN, Asbahr HD, and Phelps PN. *In situ* hybridization of immunoglobulin light chain mRNA of bone marrow trephines using biotinylated probes and the APAAP method. Pathology 25(1): 63-7, 1993.
2. Weiss LM, Movahed LA, Chen YY, Shin SS, Stroup RM, Bui N, Estess P, and Bindl JM. Detection of immunoglobulin light chain mRNA in lymphoid tissues using a practical *in situ* hybridization method. Am J Pathol 137(4): 979-88, 1990.
3. King G, Chmbers G, and Murray GI. Detection of immunoglobulin light chain mRNA by *in situ* hybridization using biotinyl tyramide signal amplification. Mol Pathol 52(1):47-50, 1999.
4. Pringle JH, Ruprai AK, Primrose L, Keyte J, Potter L, Close P, and Lauder I. *In Situ* hybridization of immunoglobulin light chain mRNA in paraffin sections using biotinylate or hapten-labeled oligonucleotide probes. J Pathol 162(3): 197-207.
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