**BioGenex**
48810 Kato Road, Suite 100E & 200E,Fremont, CA 94538
Tel : +1 (800) 421-4149, Fax: +1 (510) 824-1490,
support@biogenex.com

CE EC REP Emergo Europe, Prinsessegracht 20 2514 AP The Hague, The Netherlands

# DATA SHEET
# Retinoblastoma (RB) Probe

| **Catalog No.** | **Description** |
|---|---|
| **PR225-100E** | One vial of 0.650 ml fluoresceinated oligonucleotide Retinoblastoma (RB) probe |

Doc No: 932- PR225-100E Rev: C
Date of Release: 20-Aug-2020

**REAGENT SUPPLIED**
1 x 0.650 ml of pre-diluted fluoresceinated oligonucleotide Retinoblastoma (RB) probe in hybridization solution.

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

**SPECIFICATIONS**
The Retinoblastoma oligonucleotide probe detects transcripts of RB gene in all normal tissues and many non retinoblastoma tumors in formalin-fixed, paraffin-embedded human tissues by *in situ* hybridization.

**DESCRIPTION**
The retinoblastoma tumor suppressor gene, RB, encodes a protein of 110 KD that plays an important role in cell growth regulation. Retinoblastoma is an intraocular cancer of early childhood that arises from the developing retina. In a substantial proportion of cases, susceptibility to retinoblastoma can be inherited from a parent who was previously cured of the tumor.

**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

**Storage and Handling**
Store the probe at 2-8° C. The probe is allowed to reach room temperature prior to use.
This probe is suitable for use till expiry date when stored at 2-8°C. If reagents are stored under any conditions other than those specified in the package insert, they must be verified by the user.
Positive and negative controls should be run simultaneously for every experiment. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the antibody is suspected, contact BioGenex Technical Support at **1-800-421-4149 or your local distributor**.

**Specimen Collection and Slide Preparation**
Tissues fixed in 10% (v/v) formalin are suitable for use prior to paraffin embedding and sectioning.

**Treatment of Tissues Prior to Staining**
All formalin-fixed, paraffin-embedded tissue sections require pretreatment with Nucleic Acid Retrieval solution (NAR)

**Troubleshooting**
Contact BioGenex Technical Service Department at **1-800-421-4149 or your local distributor** to report unusual staining.

**Expected Results**
Proper use of this probe will result in an intense stain at the specific site of the hybridized fluorescein-labeled probe in positive test tissue. If staining is absent from any positive control slides, or present in any negative control slides, the test should be considered invalid.

**Limitations of the Procedure**
Correct treatment of tissues prior to and during fixation, embedding, and sectioning is important for obtaining optimal results. Inconsistent results may be due to variations in tissue processing, as well as inherent variations in tissue. The results from *in situ* hybridization must be correlated with other laboratory findings.

**Performance Characteristics**
BioGenex has conducted studies to evaluate the performance of the probe with BioGenex detection systems and accessories. The probes have been found to be sensitive and show specific binding to the target sequence of interest with minimal to no binding to non-specific tissues or cells. BioGenex probes have shown reproducible and consistent results when used within a single run, between runs, between lots and wherever applicable between manual and automated runs. The products have been determined to be stable for the periods specified on the labels either by standard real time or accelerated methods. BioGenex ensures product quality through standard quality control for all products released and through surveillance programs.

**REFERENCES**
1. Lee D, Xiong S, Xiong WC. General Introduction to In Situ Hybridization Protocol Using Nonradioactively Labeled Probes to Detect mRNAs on Tissue Sections. Methods Mol Biol. 2013;1018:165-74.

2. Wilkinson DG. In Situ Hybridization, A Practical Approach, Oxford University Press (1992) ISBN 0 19 963327 4.