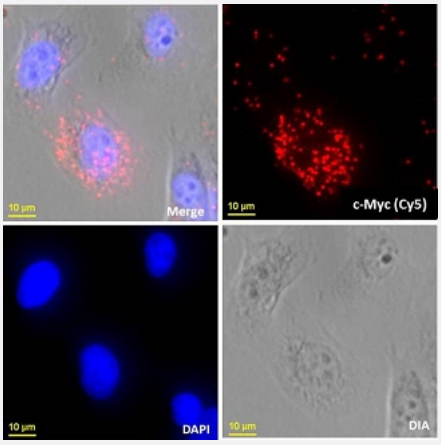
# mutaFISH™ c-Mycwt RNA Probes

Catalog # FP0015 Size 1 Probe Set

## Applications




### mutation specific, Fluorescence *In Situ* Hybridization (Cells)

mutaFISH™ staining was performed *in situ* in human H1975 cells. c-Myc was detected via red signal (Cy5).

## Specification

| | |
|---|---|
| **Product Description** | mutaFISH™ c-Mycwt RNA Probes is designed to detect human c-Myc gene on single strand RNA in cells using padlock probe and *in situ* rolling-circle amplification technology. |
| **Reactivity** | Human |
| **Supplied Products** | Content:<br>1. RT c-Myc Primer<br>2. mutaFISH™ c-Mycwt RNA Probe<br>3. Detection Probe-Texas Red X |
| **Technology** | mutaFISH™ (mutation-specific Fluorescence *In Situ* Hybridization) |
| **Comparison** | FISH Probes vs mutaFISH™ Probes |
| **Fluorophore** | Texas Red X (Excitation Peak (nm): 595; Emission Peak 613) |
| **Probe Position** | |

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|---|---|
| **Regulatory Status** | For research use only (RUO) |
| **Storage Instruction** | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing. |
| **Note** | We recommend mutaFISH™ RNA Accessory Kit (Catalog #: KA4915) which provides necessary re agents and enzymes for *in situ* reverse transcription, RNA digestion, mutaFISH™ hybridization, ligati on and amplication prior to mutaFISH™. |
| **Self-Attestation** | Abnova self-attests to comply with the U.S. Framework for Nucleic Acid Synthesis Screening |
| **Video** | |

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## Gene Info — MYC

| | |
|---|---|
| **Entrez GeneID** | 4609 |
| **Gene Name** | MYC |
| **Gene Alias** | bHLHe39, c-Myc |
| **Gene Description** | v-myc myelocytomatosis viral oncogene homolog (avian) |
| **Omim ID** | 113970 190080 |
| **Gene Ontology** | Hyperlink |

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| | |
|---|---|
| **Gene Summary** | The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that plays a role in cell cycle progression, apoptosis and cellular transformation. It functions as a transcription factor that regulates transcription of specific target genes. Mutations, overexpression, rearrangement and translocation of this gene have been associated with a variety of hematopoietic tumors, leukemias and lymphomas, including Burkitt lymphoma. There is evidence to show that alternative translation initiations from an upstream, in-frame non-AUG (CUG) and a downstream AUG start site result in the production of two isoforms with distinct N-termini. The synthesis of non-AUG initiated protein is suppressed in Burkitt's lymphomas, suggesting its importance in the normal function of this gene. [provided by RefSeq |
| **Other Designations** | avian myelocytomatosis viral oncogene homolog\|myc proto-oncogene protein\|v-myc avian myelocytomatosis viral oncogene homolog |

## Pathway

- Acute myeloid leukemia
- Bladder cancer
- Cell cycle
- Chronic myeloid leukemia
- Colorectal cancer
- Endometrial cancer
- ErbB signaling pathway
- Jak-STAT signaling pathway
- MAPK signaling pathway
- Pathways in cancer
- Small cell lung cancer
- TGF-beta signaling pathway
- Thyroid cancer
- Wnt signaling pathway

## Disease

- Alzheimer disease

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- Breast cancer
- Breast Neoplasms
- Carcinoma
- Cardiovascular Diseases
- Chromosome Aberrations
- Colorectal Neoplasms
- Diabetes Complications
- Disease Progression
- Genetic Predisposition to Disease
- Helicobacter Infections
- Hematologic Diseases
- Hodgkin Disease
- Kidney Failure
- Lung Neoplasms
- Lymphoma
- Lymphoproliferative Disorders
- Metabolic Syndrome X
- Mouth Neoplasms
- Neoplasm Metastasis
- Neoplasms
- Occupational Diseases
- Osteoporosis
- Ovarian cancer
- Ovarian Neoplasms
- Prostate cancer
- Prostatic Neoplasms

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- Pulmonary Disease
- Stomach Neoplasms
- Thyroid Diseases
- Thyroid Neoplasms
- Translocation
- Urinary Bladder Neoplasms
- Waldenstrom Macroglobulinemia
- Werner syndrome

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