

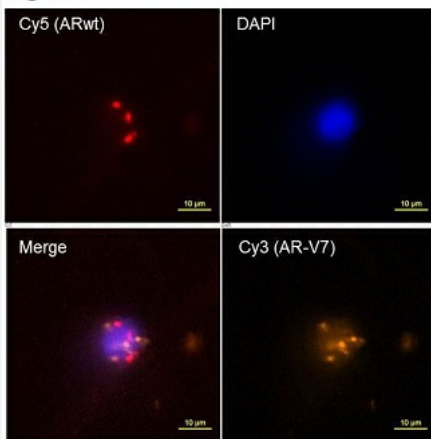
mutaFISH™ AR-V7 ARwt RNA Probes

Catalog # FP0004

Size 1 Probe Set

Applications

Fig. 1

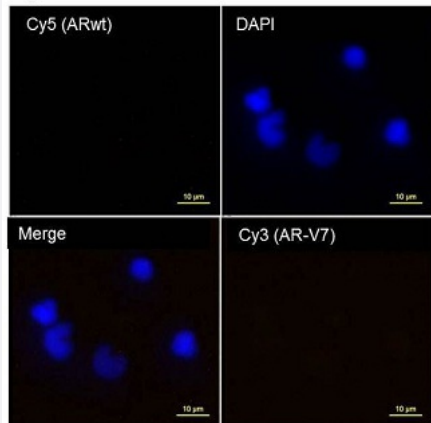


mutation specific, Fluorescence *In Situ* Hybridization (Cells)

Fig.1 mutaFISH™ staining was performed *in situ* in human CWR22Rv1 cells captured by CytoQuest™ CR. AR-V7 was detected via orange signal (Cy3), and ARwt was detected via red signal (Cy5).

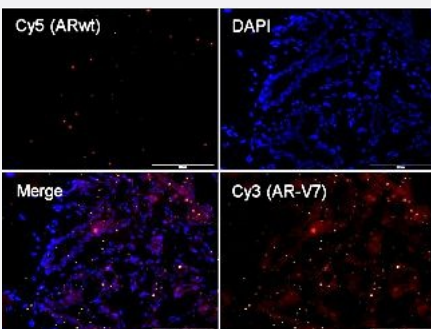
Fig.2 mutaFISH™ staining was performed *in situ* in human PBMC cells. Both AR-V7 and ARwt were not detected.

Fig. 2



mutation specific, Fluorescence *In Situ* Hybridization (Frozen Tissue)

mutaFISH™ staining was performed *in situ* in human frozen tissue from breast cancer. ARwt was detected via red signal (Cy5), and AR-V7 was detected via orange signal (Cy3).



Specification

Product Description mutaFISH™ AR-V7 ARwt RNA Probes is designed to detect AR wildtype and AR-V7 on single strand RNA in cells using padlock probe and *in situ* rolling-circle amplification technology.

Reactivity Human

Supplied Product Content:

1. RT AR-V7 Primer
2. RT ARwt Primer
3. mutaFISH™ AR-V7 RNA Probe
4. mutaFISH™ ARwt RNA Probe
5. Detection Probe-Aqua 431
6. Detection Probe-Texas Red X

Technology [mutaFISH™ \(mutation-specific Fluorescence *In Situ* Hybridization\)](#)

Comparison [FISH Probes vs mutaFISH™ Probes](#)

Fluorophore Aqua 431 (Excitation Peak (nm): 431; Emission Peak (nm): 480)
Texas Red X (Excitation Peak (nm): 595; Emission Peak 613)

Probe Position

Regulatory Status For research use only (RUO)

Storage Instruction Store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note We recommend mutaFISH™ RNA Accessory Kit (Catalog #: [KA4915](#)) which provides necessary reagents and enzymes for *in situ* reverse transcription, RNA digestion, mutaFISH™ hybridization, ligation and amplification prior to mutaFISH™.

Video

Applications

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

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- mutation specific, Fluorescence *In Situ* Hybridization (Frozen Tissue)

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Gene Info — AR

Entrez GeneID [367](#)

Gene Name AR

Gene Alias AIS, DHTR, HUMARA, KD, NR3C4, SBMA, SMAX1, TFM

Gene Description androgen receptor

Omim ID [176807](#) [300068](#) [300633](#) [313200](#) [313700](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The androgen receptor gene is more than 90 kb long and codes for a protein that has 3 major functional domains: the N-terminal domain, DNA-binding domain, and androgen-binding domain. The protein functions as a steroid-hormone activated transcription factor. Upon binding the hormone ligand, the receptor dissociates from accessory proteins, translocates into the nucleus, dimerizes, and then stimulates transcription of androgen responsive genes. This gene contains 2 polymorphic trinucleotide repeat segments that encode polyglutamine and polyglycine tracts in the N-terminal transactivation domain of its protein. Expansion of the polyglutamine tract causes spinal bulbar muscular atrophy (Kennedy disease). Mutations in this gene are also associated with complete androgen insensitivity (CAIS). Two alternatively spliced variants encoding distinct isoforms have been described. [provided by RefSeq]

Other Designations OTTHUMP00000023450|OTTHUMP00000061928|dihydrotestosterone receptor

Pathway

- [Pathways in cancer](#)
- [Prostate cancer](#)

Disease

- [Abortion](#)
- [Acne Vulgaris](#)
- [Adenocarcinoma](#)
- [Adrenal Hyperplasia](#)
- [Alcoholism](#)
- [Alopecia](#)
- [Alzheimer disease](#)
- [Androgen-Insensitivity Syndrome](#)
- [Angina Pectoris](#)
- [Antisocial Personality Disorder](#)
- [Arteriosclerosis](#)
- [Arthritis](#)
- [Asperger Syndrome](#)
- [Atherosclerosis](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Azoospermia](#)
- [Biliary Tract Neoplasms](#)
- [Bipolar Disorder](#)
- [Birth Weight](#)
- [Bone Neoplasms](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)

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- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
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- [Cognition Disorders](#)
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- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Disease](#)
- [Cryptorchidism](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Diabetic Retinopathy](#)
- [Disease Progression](#)
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- [Edema](#)
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- [Endometriosis](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Fibroadenoma](#)
- [Fractures](#)
- [Fragile X syndrome](#)

- [Friedreich Ataxia](#)
- [Functional Laterality](#)
- [Gallstones](#)
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- [Gynecomastia](#)
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- [Hepatitis B](#)
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- [Hip Fractures](#)
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- [Hyperandrogenism](#)
- [Hyperplasia](#)
- [Hypertension](#)
- [Hypertrophy](#)
- [Hypogonadism](#)
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- [Infertility](#)
- [Inflammation](#)
- [Insulin Resistance](#)
- [Klinefelter Syndrome](#)
- [Leiomyoma](#)
- [Libido](#)

- [Liver Neoplasms](#)
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- [Lymphopenia](#)
- [Machado-Joseph Disease](#)
- [Male pattern baldness](#)
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- [Mental Disorders](#)
- [Metabolic Syndrome X](#)
- [Microsatellite Instability](#)
- [Migraine Disorders](#)
- [Mood Disorders](#)
- [Muscular Atrophy](#)
- [Muscular Disorders](#)
- [Myocardial Infarction](#)
- [Myoclonic Epilepsies](#)
- [Myotonic dystrophy](#)
- [NARP](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
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- [Recurrence](#)
- [Schizophrenia](#)
- [Seminoma](#)

- [Severe combined immunodeficiency](#)
- [Sex Chromosome Aberrations](#)
- [Sex determination](#)
- [Sexual Dysfunction](#)
- [Sexual Dysfunctions](#)
- [Social Perception](#)
- [Spinal Diseases](#)
- [Spinal Fractures](#)
- [Spinal muscular atrophy](#)
- [Spinocerebellar ataxia](#)
- [Spinocerebellar Ataxias](#)
- [Stroke](#)
- [Substance Withdrawal Syndrome](#)
- [Substance-Related Disorders](#)
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- [Testicular Neoplasms](#)
- [Thinness](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Ureteral Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Calculi](#)
- [Uterine Neoplasms](#)
- [Virilism](#)
- [Weight Gain](#)
- [Weight Loss](#)