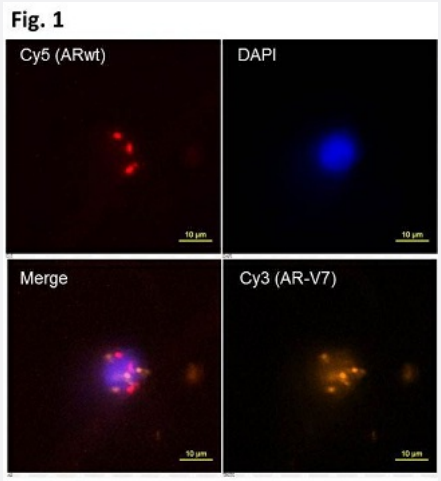
mutaFISH™ AR-V7 ARwt RNA Probes

Catalog # FP0004 Size 1 Probe Set

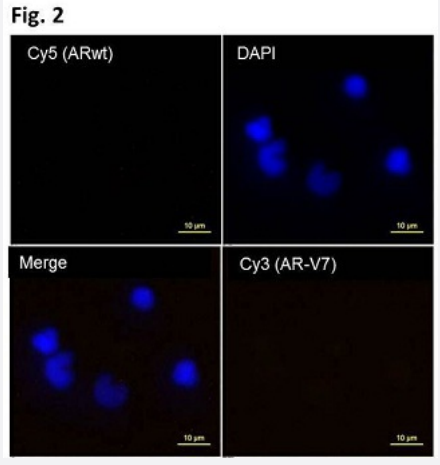
Applications

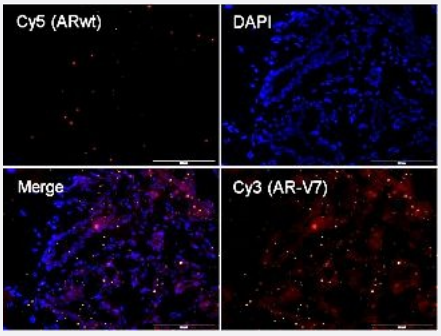


mutation specific, Fluorescence *In Situ* Hybridization (Cells)

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.





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).

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Specification

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

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Video

Applications

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

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

- 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).

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

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Gene Summary	The androgen receptor gene is more than 90 kb long and codes for a protein that has 3 major fun ctional domains: the N-terminal domain, DNA-binding domain, and androgen-binding domain. Th e 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 polymorphi c 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 m uscular atrophy (Kennedy disease). Mutations in this gene are also associated with complete and rogen 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

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- Atherosclerosis
- Attention Deficit Disorder with Hyperactivity
- Autistic Disorder
- Azoospermia
- Biliary Tract Neoplasms
- Bipolar Disorder
- Birth Weight
- Bone Neoplasms
- Brain Ischemia
- Breast cancer
- Breast Neoplasms
- Cadaver
- Carcinoma
- Cardiomyopathy
- Cardiovascular Diseases
- Chromosome Aberrations
- Cognition
- Cognition Disorders
- Colon cancer
- Colonic Neoplasms
- Colorectal Neoplasms
- Coronary Disease
- Cryptorchidism
- Depressive Disorder
- Diabetes Complications
- Diabetes Mellitus

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- Diabetic Nephropathies
- Diabetic Retinopathy
- Disease Progression
- Dyslipidemias
- Edema
- Endometrial Neoplasms
- Endometriosis
- Epilepsy
- Esophageal Neoplasms
- Fibroadenoma
- Fractures
- Fragile X syndrome
- Friedreich Ataxia
- Functional Laterality
- Gallstones
- Gender Identity
- Genetic Predisposition to Disease
- Germinoma
- Gonadal Dysgenesis
- Gynecomastia
- Head and Neck Neoplasms
- Heart Diseases
- Hepatitis B
- Hepatitis C
- Hip Fractures
- Hirsutism

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- Hyperandrogenism
- Hyperplasia
- Hypertension
- Hypertrophy
- Hypogonadism
- Hypospadias
- Infertility
- Inflammation
- Insulin Resistance
- Klinefelter Syndrome
- Leiomyoma
- Libido
- Liver Neoplasms
- Lung Neoplasms
- Lymphoma
- Lymphopenia
- Machado-Joseph Disease
- Male pattern baldness
- Memory
- Mental Disorders
- Metabolic Syndrome X
- Microsatellite Instability
- Migraine Disorders
- Mood Disorders
- Muscular Atrophy
- Muscular Disorders

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- Myocardial Infarction
- Myoclonic Epilepsies
- Myotonic dystrophy
- NARP
- Neoplasm Invasiveness
- Neoplasm Metastasis
- Neoplasm Recurrence
- Neoplasms
- Neovascularization
- Neuropsychological Tests
- Obesity
- Oligospermia
- Osteoarthritis
- Osteoporosis
- Ovarian cancer
- Ovarian Diseases
- Ovarian Failure
- Ovarian Neoplasms
- Personality Assessment
- Personality Tests
- Phobic Disorders
- Polycystic Ovary Syndrome
- Precancerous Conditions
- Pre-Eclampsia
- Prenatal Exposure Delayed Effects
- Prostate cancer

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- Prostatic Diseases
- Prostatic Hyperplasia
- Prostatic Neoplasms
- Psychiatric Status Rating Scales
- Psychological Tests
- Psychophysiologic Disorders
- Psychosexual Development
- Puberty
- Rectal Neoplasms
- 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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- Task Performance and Analysis
- Testicular Neoplasms
- Thinness
- Thrombophilia
- Tobacco Use Disorder
- Ureteral Neoplasms
- Urinary Bladder Neoplasms
- Urinary Calculi
- Uterine Neoplasms
- Virilism
- Weight Gain
- Weight Loss

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