MOLECULAR DIAGNOSTICS TESTING SOLUTIONS

EXCELLENT PERFORMANCE OF RT-PCR TESTS FOR ACCURATE DIAGNOSIS & TRUE SCREENING

MOLGEN CE-IVD GENETICS AZF-MICRODELETIONS KIT

MALE FERTILITY AND Y CHROMOSOME MICRODELETIONS

AZF, microdeletions of azoospermia factors, occur in the Y-chromosome regions Yq, responsible for spermatogenesis causing abnormalities in spermatogenesis and, therefore, male infertility.

At molecular level, deletions extend over 0.8 - 7.7 Mb, including several genes, but the size of AZF loci is too small to be detected by cytogenetics methods, that is why "microdeletions" term is used.

According to "EAA/EMQN best practice guidance for molecular diagnosis of Y-chromosomal microdeletions", microdeletions were detected in conventional Azoospermia factors loci at the q arm of the Y chromosome, AZFa, AZFb, AZFc by real-time PCR.

The absence of any group of markers in the patient specimen DNA confirms the deletion of the corresponding AZF locus.

To detect AZFa, AZFb and AZFc deletions following specific marker sequences were selected: sY-84 and sY- 86 (AZFa locus); sY-127 and sY-134 (AZFb locus); sY- 254 and sY-255 (AZFc locus).

The detection of the sex-determination SRY gene at the Yp arm (that is responsible for the initiation of male sex determination in humans and is absent in females) is performed in order to confirm the presence of Y- chromosome DNA in the specimen and male gender confirmation.

To confirm the presence of sufficient amount of human DNA in the specimen, the amplification of HMBS gene fragment located in autosome is performed simultaneously with Y-chromosome markers.

AZF-MICRODELETIONS KIT FOR BASIC DELETION SCREENING

- The identification and analysis of Y chromosome deletions is an important research tool for studying male infertility.
- Deletions in three regions, AZFa, AZFb, AZFc and are associated with male infertility.
- MOLgen Genetics AZF-Microdeletions Kit amplifies nonpolymorphic short DNA segments of the Y-chromosome by using Real-Time PCR.

FEATURES & ADVANTAGES

- All-in-one dried formats, easy to use with minimized steps.
- High potential for specific detection of all markers needed for basic deletion screening as recommended by European Academy of Andrology (EAA) and the European Molecular Genetics Quality Network (EMQN).
- Controls: sex-determining region Y protein (SRY gene) and HMBS gene for sample quality assurance.
- Stable storage of reagents/kits up to a year at 2-8°C, no freezing is required.
- Transportation of kits at temperatures up to +25°C. for up to 10-days.

SPECIMEN

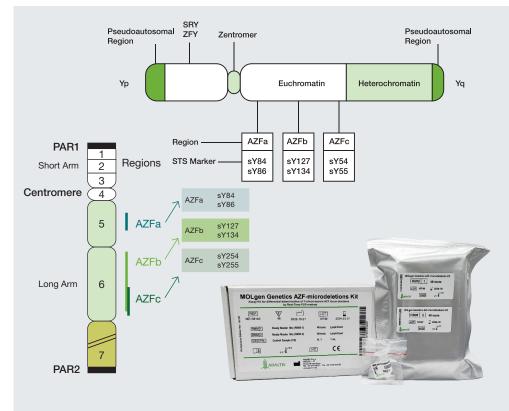
Whole blood
 Buccal epithelium

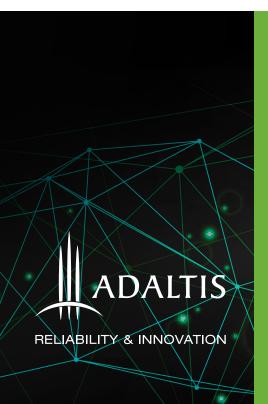
AUTOMATED WORKFLOW

- Automated Extraction EXTRAlab
- Automated Extraction eLab
- RT-PCR AMPLilab

COMPATABILITY

Compatible thermal cyclers: AMPLIIab (Adaltis) CFX96™ (Bio-Rad, USA), DTprime (DT-96)





REF: ME138140

48 RXNS

GENETIC	S		
Code	Kit Name	Format	Number of Tests
ME138020	 MOLgen Genetics Haemostatic Disease (F2/F5) 	STR	48
ME138030	 MOLgen Genetics Haemostatic Diseases (MTR/ MTRR/ MTHFR) 	STR	48
ME138310	 MOLgen Genetics Haemostatic Disease (B-Fibrinogen/FXIII) 	STR	48
ME138320	 MOLgen Genetics Haemostatic Disease (ITGA2/FVII) 	STR	48
ME138330	 MOLgen Genetics Haemostatic Diseases (PAI-1/ITGB3) 	STR	48
ME138060	 MOLgen Genetics ACE Del287/AGT T704C 	STR	48
ME138070	 MOLgen Genetics BRCA (BRCA1 185delAG / 3875del4) Kit 	STR	48
ME138080	 MOLgen Genetics BRCA (BRCA1 3819del5 / T300G) Kit 	STR	48
ME138090	 MOLgen Genetics BRCA (BRCA1 2080delA(insA) / BRCA2 6174delT) Kit 	STR	48
ME138120	 MOLgen Genetics BRCA (BRCA1 4153delA / 5382insC) Kit 	STR	48
ME138220	 MOLgen Genetics Hemochromatosis (HFE 187 C/G) Kit 	STR	48
ME138230	 MOLgen Genetics Hemochromatosis (HFE 193 A/T) Kit 	STR	48
ME138240	 MOLgen Genetics Hemochromatosis (HFE 845 G/A) Kit Reagent kit is intended for differential determination of single-nucleotide polymorphisms of the coagulation system and folate cycle by real-time PCR with detection of melting curves. 		
ME138360	 MOLgen Genetics HLA-B*27 NEW Reagent kit is intended for detection of HLA-b*27 allele by real-time PCR. 	UNI	48
ME138040	 MOLgen Genetics MCM6 	UNI	48
	Reagent kit is designed for determination of single-nucleotide polymorphism of MCM6 gene - 13910C/T by real-time PCR with detection of melting curves.		
ME138110	 MOLgen Genetics Interleukin 28B 	UNI	48
	Reagent kit is designed for determination of single-nucleotide polymorphism of interleukin 28B gene by real-time PCR with detection of melting curves.		
ME138140	 MOLgen Genetics AZF - Microdeletions Kit 	STR	48
	Reagent kit is designed for differential determination of Y-chromosome AZF locus deletions by real-time PCR.		
ME138270	 MOLgen Genetics Warfarin (CYP2C9*2/CYP2C9*3) Kit NEW 	STR	48
	Reagent kit is intended for the determination of single nucleotide polymorphisms (SNPs) 430 C/T in CYP2C9 gene (CYP2C9*2) and 1075 A/C in CYP2C9 gene (CYP2C9*3). The kits contain reagents for real-time PCR only.		
ME138280	 MOLgen Genetics Warfarin (VKORC1/CYP4F2*3) Kit NEW 	STR	48
	Reagent kit is intended for the determination of single nucleotide polymorphisms (SNPs) 1173 C/T in VKORC1 gene and 1297 C/T in CYP4F2 gene (CYP4F2*3).		
ME138290	 MOLgen Genetics Warfarin (GGCX) Kit NEW Reagent kit is intended for the determination of single nucleotide polymorphism rs11676382 C/G in GGCX gene. 	STR	48
ME138300	 MOLgen Genetics Warfarin (CYP2C9*5/CYP2C9*6) Kit NEW Reagent kit is intended for the determination of single nucleotide polymorphisms (SNPs) 1080 C/G in CYP2C9 gene (CYP2C9*5) and 818 delA in CYP2C9 gene (CYP2C9*6). 	STR	48

The kits contain reagents for real-time PCR only.

Y-chr 11.3 Male specific region of the Y-chromosome (MSY) SRY(Control) 11.2 X/Y B(SD) amXY(SD) ₹ ZFY(Control) M259(STS) USP9Y SY625(STS) AZFa DDX3Y SY86(STS) UTY SY84(STS) 11.221 SY90(Control) CDY2A HSFY1 HSFY2 SY127(STS) RPS4Y2 AZFb SY130(STS) RBMY1B SY131(STS) ă RBMY1A1 DYS448(STR & STS) RBMY1D RBMY1E PRY BPY2 DAZ1 A SY152(STS) C SY153(STS) DAZ2 CDY1B and SY254(STS) SY255(STS) SY157(STS) DAZ3 DAZ4 BPY2C CDY1A ADALTIS

MOLECULAR DIAGNOSTICS



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