

الكشف عن دوام الكيمرة الجنينية المصغرة فى الدم
المحيطى للأم
بواسطة تفاعل البلمرة المتسلسل الكمي
(Quantitative real time PCR)
و مجس خاص بالصبغ الذكري
(Y chromosome)

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**Detection of Fetomaternal Microchimerism in Maternal
Blood By
Quantitative Polymerase Chain Reaction-Based
Assay With
Fluorogenic “Y”- Chromosome Specific Probes**

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LIST OF ABBREVIATIONS

ANOVA	Analysis Of Variance
BFU-E	Burst Forming Unit - Erythroid
bp	Base pairs
c DNA	Complementary Deoxyribonucleic Acids
CD	Cluster Of Differentiation
CFU-Baso	Colony Forming Unit - Basophil
CFU-E	Colony Forming Unit - Erythrocyte
CFU-Eo	Colony Forming Unit -Eosinophil
CFU-G	Colony Forming Unit - Granulocyte
CFU-GEMM	Colony Forming Unit – Granulocyte - Erythrocyte Megakaryocyte -Monocyte
CFU-M	Colony Forming Unit – Macrophage
CFU-meg	Colony Forming Unit – Megakaryocyte
CLP	Common Lymphoid Progenitors
CMP	Common Myeloid Progenitors
dNTPs	Deoxy-Nucleotide Triphosphates
dUTP	Deoxy Uridine Triphosphate
DNA	Deoxyribonucleic Acid

ds DNA	Double Strand Deoxyribonucleic Acid
DYS	DNA Y-chromosome Segment
EDTA	Ethylene-Diamino Tetra Acetate
FAM	6-Carboxyfluorescein (Fluorescent Dye)
FISH	Fluorescence In Situ Hybridization
FL	Fluoresceine
FM	Fetal Microchimerism
FRET	Fluorescence Resonance Energy Transfer
G. PBMC	Growth Factor Mobilized Peripheral Blood Mononuclear Cells
GMP	Guanosine MonoPhosphate
GVHD	Graft Versus Host Disease
gd-PCR	Gene Dose - Polymerase Chain Reaction
H ₂ O	Water
HS	Highly Significant
HCT	Hematopoietic Cell Transplantation
HLA	Human Leukocyte Antigen
HSC	Hematopoietic Stem Cell

ICM	Inner Cell Mass
IL	Interleukin
IPRP HPLC	Ion Pair Reversed Phase – High Performance Liquid Chromatography
JDM	Juvenile Dermatomyositis
JIIM	Juvenile Idiopathic Inflammatory Myopathies
LATE - PCR	Linear After The Exponential – Polymerase Chain Reaction
LCRed	Light Cycler Red
LT-HSC	Long term Hematopoietic Stem Cell
ml	Milli Liter
mRNA	Messenger Ribonucleic Acid
MC	Microchimerism
Mg	Magnesium
Mg cl ₂	Magnesium Chloride
min	Minute
MLPA	Multiplex Ligation Dependent Probe Amplification
MMC	Maternal Microchimerism
Mn	Manganese

MPP	Multipotent Progenitor
MTX	Methotrexate
NIMA	Noninherited Maternal Antigens
NK	Natural Killer
NLS	Neonatal Lupus Syndrome
NS	Not Significant
Pb	Probe
PBC	Primary Biliary Cirrhosis
PBMC	Peripheral Blood Mononuclear Cell
PC	Personal Computer
PCR	Polymerase Chain Reaction
Pfu	Pyrococcus furiosus
PM	Polymyositis
Prm	Primers
Pwo	Pyrococcus woesei
Q PCR	Quantitative Polymerase Chain Reaction
QRT-PCR	Quantitative Real Time Polymerase Chain Reaction
RFLP	Restriction Fragment Length Polymorphism

RNA	Ribonucleic Acid
RT - PCR	Reverse Transcriptase -Polymerase Chain Reaction
S	Significant
SCID	Severe Combined Immunodeficiencies
SD	Standard Deviation
Sec	Second
SRY	Sex-Determining Region Y-Chromosome
SSc	Systemic Sclerosis
SSO-PCR	Sequence Specific Oligonucleotide Probes -Polymerase Chain Reaction
ST-HSC	Short Term Hematopoietic Stem Cell
STR	Short Tandem Repeat
T1D	Type 1 Diabetes
TA-MC	Transfusion Associated Microchimerism
TAIL - PCR	Thermal Asymmetric Interlaced - Polymerase Chain Reaction
Taq	Thermophilus Aquaticus
TAMRA	6-Carboxy-tetramethyl-rhodamin (Fluorescent Dye)
T_m	Melting Temperature
TULIPS	Touch Up & Loop Incorporated Primers

UNG	Uracil Deoxyribonucleic Acid Glycosylase
UTP	Uridine Triphosphate
x	Mean
µg	Microgram
µL	Micro Litre
%	Percentage

INTRODUCTION & AIM OF THE WORK