

شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو

# بسم الله الرحمن الرحيم





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# جامعة عين شمس التوثيق الإلكتروني والميكروفيلم قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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### Association analysis of gene polymorphisms of *ABCA7*, *Clusterin* and *MS4A6A* in Alzheimer

Submitted in partial fulfillment for the requirements of the master degree of Science in Biochemistry

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### LIST OF ABBREVIATIONS

#### Abbreviated name Full name

3'UTR : 3' untranslated region

Aβ : Amyloid beta

ABCA7 : ATP-binding cassette transporter A7

Ach : Acetylcholine

**AChE** : Acetylcholinesterase AD : Alzheimer's Disease

**ADAM** : Disintegrin and metalloprotease **AICD** : Amyloid Intra-Cellular Domain

**AMPA** : α-amino-3-hydroxy-5-methyl-4-isoxazole

propionic Acid

APH-1 : Anterior pharynx defensive phenotype 1

ApoA-I : Apolipoprotein A-I **APOE** : Apolipoprotein E APOE ε4 : Apolipoprotein Ε ε4

APP : Amyloid Precursor Protein

BACE :  $\beta$ - site – APP – cleaving enzyme **BCR** : β cell antigen receptor complex

**BBB** : Blood brain barrier

Bp : Base pair

BuChE : Butyryl cholin esterase

**CDRS** : Clinical Dementia Rating Scale

**CJD** : Creutzfeldt-Jakob disease

CLU : Clusterin

CNS : Central nervous system **CSF** : Cerebrospinal fluid

CT : Computerized tomography **DLB** : Dementia with Lewy bodies **DNA** 

: Deoxyribonucleic acid

**dNTP** : Deoxynucleotide triphosphate

: Statistical Manual of Mental Disorders-5 DSM-5

**DTT** : Dithiothreitol EC : Entorhinal cortex **EDTA** : Ethylene diamine tetra-acetic acid

**FEOAD** : Familial early-onset Alzheimer's disease

**FTD** : Front temporal dementia

g : GramG : Guanine

GABA : Gamma aminobutyric acid

**GWAS** : Genome-wide association study

HDL : High density lipoproteinIDE : Insulin degrading enzyme

**LOAD** : Late onset Alzheimer's disease

**LRP** : Lipoprotein receptor-related protein

LTD : Long-term depression
LTP : Long term potentiation
MCI : Mild Cognitive Impairment
MMSE : Mini-Mental State Examination

MoCA-B : Montreal Cognitive Assessment-Basic

MRI : Magnetic resonance imaging

MS4A6A : Membrane-Spanning-4-domains, subfamily

A, member 6A

**NEP**: Neprilysin

**NFT** : Neurofibrillary tangle.

NIH : National Institute of Health

NMDA : N- methyl-D-aspartate

NPH : Normal pressure hydrocephalus

OMIM No. : Online Mendelian Inheritance in Man number,

Aknowledge base of human genes and genetic

disorders

OS : Oxidative stress

**PCR** : Polymerase chain reaction

**PD** : Parkinson's disease

PET : Positron emission tomography
PNS : Peripheral nervous system

**RAGE** : Receptor for advanced glycation end products

**RE** : Restriction enzyme

**RFLP** : Restriction fragment length polymorphism

ROS : Reactive oxygen species
SDS : Sodium dodecyl sulfate

**SNPs** : Single nucleotide polymorphisms

TBE : Tris-borate EDTATBI : Traumatic brain injury

**TE**: Tris-EDTA

**TNF**: Tumor necrosis factor

TREM2 : Triggering receptor expressed in myloid cell 2

**WHO** : World Health Organization

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