



Role of Nerve Growth Factor and Amyloid Precursor Protein in neurocognition in Children with Down's Syndrome

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سببناك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢



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Dedication

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List of Abbreviations

Abbr.	Full-term
Aβ	: Amyloid beta
AChE	: Acetylcholinesterase
AD	: Alzheimer's disease
APOE	: Apolipoprotein E
APP	: Amyloid precursor protein
BDNF	: Brain-derived neurotrophic factor
BFCNs	: Basal forebrain cholinergic neurons
CBF	: Cholinergic basal forebrain (CBF)
ChAT	: Choline acetyltransferase
CHD	: Congenital heart diseases
CNS	: Central nervous system
CREB	: Cyclic AMP response element binding protein
CuBD	: Copper-binding domain
CVS	: Cardiovascular system
CVS	: Chorionic villus sampling
DHEA	: Dehydroepiandrosterone
DS	: Down syndrome
DSCR	: Down syndrome critical regions"
GAB1	: Grb2-associated Binder-1
GABA	: Gamma aminobutyric acid,
GDNF	: Glial cell line-derived neurotrophic factor
GFLD	: Growth Factor-Like Domain
Grb2	: Growth factor-receptor" bound protein-2
IQ	: Intelligent Quotient
JNK	: Jun N-terminal kinase
LOAD	: Late-onset Alzheimer's disease

LPS	: Lipopolysaccharide
MAPK	: Mitogen-activated protein kinase
MLPA	: Multiplex ligation-dependent probe amplification
NB	: Nucleus basalis
NFTs	: Neurofibrillary tangles
NGF	: Nerve growth factor
NRIF	: Neurotrophin receptor interacting factor
p75NTR	: p75 neurotrophin receptor
PCR	: Polymerase chain reaction
PI3K	: Phosphatidylinositol-3 kinase
PICALM	: Phosphatidylinositol binding clathrin assembly protein
RSK	: Ribosomal s6 kinase
SD	: Standard deviation
SPSS	: Statistical package for Social Science

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