Microglial Activation in the Hippocampus of LPS/CMS Exposed Rats: The Role of Lithium Chloride in the Wnt/β-Catenin Pathway

Thesis submitted for partial fulfilment of M.D. Degree in Pharmacology **By**

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List of abbreviations

5-HT	Serotonin
AD	Alzheimer's Disease
AMP	Adenosine Mono-Phosphate
APC	Adenomatous Polyposis Coli
ARG1	Arginase-1
BDNF	Brain Derived Neurotrophic Factor
Ca	Calcium
CCL3	Chemokine (C-C motif) ligand 3
CCL5	Chemokine (C-C motif) ligand 5
CCL8	Chemokine (C-C motif) ligand 8
CCL11	Chemokine (C-C motif) ligand 11
CCL14	Chemokine (C-C motif) ligand 14
CCL15	Chemokine (C-C motif) ligand 15
CCL17	Chemokine (C-C motif) ligand 17
CCL18	Chemokine (C-C motif) ligand 18
CCL19	Chemokine (C-C motif) ligand 19
CCL20	Chemokine (C-C motif) ligand 20
CCL22	Chemokine (C-C motif) ligand 22
CCL23	Chemokine (C-C motif) ligand 23
CCL24	Chemokine (C-C motif) ligand 24
CD16	Cluster of Differentiation 16
CD32	Cluster of Differentiation 32
CD 36	Cluster of Differentiation 36
CD163	Cluster of Differentiation 163
CD200	Cluster of Differentiation 200
CD206	Cluster of Differentiation 206

CD301	Cluster of Differentiation 301	
CK1-α	Casein Kinase 1-α	
CMS	Chronic Mild Stress	
CNS	Central Nervous System	
Cox-2	Cyclo-oxygenase-2	
CXCL1	Chemokine (C-X-C motif) ligand 1	
CXCL10	Chemokine (C-X-C motif) ligand 10	
CXCL11	Chemokine (C-X-C motif) ligand 11	
CXCL13	Chemokine (C-X-C motif) ligand 13	
DA	Dopamine	
DAMPs	damage associated molecular patterns	
DKK-1	Dickkopf-related protein 1	
DVL	Disheveled	
DVL-1	Disheveled-1	
DVL-2	Disheveled-2	
DVL-3	Disheveled-3	
ELISA	Enzyme Linked Immunosorbent Assay	
FB	Foreign Body	
FST	Forced Swimming Test	
FWD	Food and Water Deprivation	
FZD	Frizzled	
GSK-3	Glycogen Synthase Kinase-3	
GSK-3 β	Glycogen Synthase Kinase-3 β	
HCV	Hepatitis C Virus	
HPA axis	Hypothalamo-Pituitary-Adrenal axis	
Iba-1	Ionized calcium binding adaptor molecule 1	

IFN-γ	Interferon- γ
IL-1	Interleukin-1
IL-1β	Interleukin-1β
IL-1RA	Interleukin-1RA
IL-2	Interleukin-2
IL-4	Interleukin-4
IL-4Rα	Interleukin-4Rα
IL-6	Interleukin-6
IL-8	Interleukin-8
IL-10	Interleukin-10
IL-12	Interleukin-12
IL-13	Interleukin-13
IL-15	Interleukin-15
IL-17	Interleukin-17
IL-18	Interleukin-18
IL-23	Interleukin-23
IGF1	Insulin-like growth factor 1
IkB	Inhibitor of kappa binding
IMP	Inositol mono-phosphate
iNOS	inducible nitric oxide synthase
i.p.	Intra-peritoneal
LDL	Low Density Lipoprotein
LEF/TCF	Lymphoid Enhancer Factor/T Cell Factor
Li Cl	Lithium Chloride
LPS	Lipopolysaccharide
LPS/CMS	Lipopolysaccharide then chronic mild stress model

LRP5/6	LDL Receptor-related Protein 5/6
MDD	major depressive disorders
МНС	Major Histo-comptability Complex
MHC II	Major Histo-comptability Complex 2
MMPs	Matrix Metalloproteinases
NF-kB	Nuclear Factor kappa B
NMDA	N-methyl-D-aspartate
NO	nitric oxide
OFT	Open Field Test
PAMPs	pathogen associated molecular patterns
PBS	Phosphate Buffered Saline
PPARγ	Peroxisome proliferator-activated receptor γ
PRRs	pattern recognition receptors
PS-DVL	phosphorylated and shifted Dishevelled
SPT	Sucrose Preference Test
TGF-ß	Transforming growth factor-ß
TLE	Transducin-like enhancer
TLR-2	Toll-like receptor-2
TLR-4	Toll-like receptor-4
TNF-α	Tumour Necrosis Factor- α
vPFC	ventral Pre-Frontal Cortex
WHO	World Health Organization
Wnt	wingless-related integration site
Wnt-1	wingless-related integration site-1
Wnt-2	wingless-related integration site-2
Wnt-3A	wingless-related integration site-3A

Wnt-5A	wingless-related integration site-5A	
Wnt-7A	wingless-related integration site-7A	
Wnt-8A	wingless-related integration site-8A	
Wnt-8B	wingless-related integration site-8B	



Introduction and Aim of the work

