9. Annexe

9.1. Abbreviations

A	Adenin
A_{595}	Optical absorption at 595nm
aa	Amino acid
Amp.	Ampicillin
ATP	Adenosine triphosphate
bp	Basepairs
BSA	Bovine serum albumin
C	Cytosine
CA	Carbonic anhydrase
CA1-14	Carbonic anhydrase 1-14 gene
CA I-XIV	Carbonic anhydrase I-XIV protein
CA-RPs	Carbonic anhydrase related proteins
°C	Degrees centigrade
cDNA	Complementrary DNA
Ci	Curie
CIP	Calf intestine phosphatase
cm	Centimeters
CNS	Central nervous system
CTP	Cytosine triphosphate
DEPC	Diethylpyrocarbonate
DMSO	Dimethylsulfoxide
DNA	Deoxyribonucleic acid
DNase	Deoxyribonuclease
dNTP	Deoxyribonucleotide triphosphate
ECM	Extracellular matrix
E.coli	Escherichia coli
EDTA	Ethylenediamine-tetraacetate
ES cells	Embryonic stem cells
EtOH	Ethanol
FCS	Fetal calf serum
G	Guanine
GI	Gastrointestinal
GLB	Gel loading buffer
G418	Geneticin
g	Gramm
HCG	Human chorionic gonadotropin
hr	Hours
ICM	Inner cell mass
i.p.	Intraperitoneal
kb	Kilobasepairs
kDa	Kilodaltons
l	Liter
LB	Luria broth
LIF	Leukemia inhibitory factor
M	Molar

MAb	Monoclonal antibody
MALDI-MS	Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry
max.	maximally
min	Minutes
MN/CA9	Carbonic anhydrase 9 gene
MN/CA IX	Carbonic anhydrase IX protein
mRNA	messenger RNA
neo	Neomycin resistance gene
OD	Optical density
oligo	Oligonucleotide
PAGE	Polyacrylamide gel electrophoresis
PBS	Phosphate-buffered saline
p.c.	Post coitus
PCNA	Proliferating cell nuclear antigen
PCR	Polymerase chain reaction
PG	Proteoglycan
PMSG	Pregnant mare serum gonadotropin
RACE	Rapid amplification of cDNA ends
RCC	renal cell carcinoma
RNA	Ribonucleic Acid
RNase	Ribonuclease
rNTP	Ribonucleotide triphosphate
rRNA	Ribosomal RNA
rpm	Revolutions per minute
RPTP-β	Receptor protein tyrosine phosphatase-β
RT	Reverse transciption
sec	Seconds
SDS	Sodium dodecyl sulfate
T	Thymidine
Taq	Thermophilus aquaticus
TdT	Terminal deoxynucleotidyl transferase
TEMED	Tetra-methyl-ethylenediamine
TM	Transmembrane
T_M	Melting temperature
tRNA	Transfer RNA
TUNEL	TdT-mediated dUTP nick end labeling
U	Units
UV	Ultra violet
V	Volts
VHL	von Hippel-Lindau
Vol	Volumes
W	Watts
wt	Wild type

9.2. Permission for Animal Experimentation

Animal experiments were conducted with the permission of the Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit, Berlin and in compliance with the Tierschutzgesetz (§ 8 Abs.1).

9.3. Publications and Presentations

9.3.1. Publications

Velisek L, Ortova M, Veliskova J, Kubova H, Mares P, ”Influence of clonazepam and valproate on kainate-induced model of psychomotorseizures” Act Nerv Super (Praha) 1989 Apr;31(1):66-67

Velisek L, Kubova H, Veliskova J, Mares P, Ortova M, ”Action of antiepileptic drugs against kainic acid-induced seizures and automatisms during ontogenesis in rats” Epilepsia 1992 Nov-Dec;33(6):987-993

Papo T, Parizot C, Ortova M, Piette JC, Frances C, Debre P, Godeau P, Gorochov G ”Apoptosis and expression of soluble Fas mRNA in systemic lupus erythematosus” Lupus 1998;7(7):455-461

Ortova Gut M, Parkkila S, Zavada J, Zavadova Z, Rohde E, Hocker M, Pastorek J, Knobeloch KP, Horak I, Pastorekova S ”Gastric hyperplasia in MN/ Carbonic anhydrase IX deficient mice”; manuscript in preparation

9.3.2. Presentations

Gene Targeting of MN/CA9 in Mouse, Kolloquien und Seminare am FMP, 1999, Berlin

Epithelial Phenotype of Mouse with a Null Mutation in the MN/CA IX Protein, 2000, invited seminar at the MDC, Berlin-Buch

Epithelial Phenotype of Mouse with a Null Mutation in the MN/CA IX Protein, 2000, invited seminar at the Campus Virchow-Klinikum, Berlin

9.4. Curriculum Vitae

Name: Marta Ortova Gut
Date of birth: 8. January 1969, Prague
Nationality: Czech

Education:

1983-1987	Baccalaureate, Jan Neruda High School, Prague, Czech Republic
1987-1993	Graduated from Faculty of Science, Charles University, Prague, Czech Republic, with a Magister Degree in Molecular Biology and Virology
1993-1994	Certificate of French Language from Cours de Civilisation Francaise de la Sorbonne, Paris, France
1995-1996	Graduated from University of Pierre et Marie Curie, Paris 6, France with the D.E.A. grade in the Doctoral Formation in Molecular and Cellular Biology of Prof. P. Cohen
1996-2000	Preparation of Ph.D. thesis at the Forschungsinstitut für Molekulare Pharmakologie, Berlin, Germany

Research Experience

1987-1988	Work on the effects of antiepileptics in a rat model, Institute of Physiology of Czech Academy of Science, Prague, Czech Republic
1990-1993	Work on the isolation and purification of hexon of Adenovirus, State Institute of Health, Prague, Czech Republic presented as Magister - Thesis
1994-1995	Work on the expression of soluble FAS protein by mononuclear cells of SLE (systemic lupus erythematosus) patients. Fellowship in the Department of Cellular Immunology, Hospital Pitie-Salpetriere, Paris, France
1995-1996	Work on the characterization of the oligonucleotide inhibitors of Topoisomerase II on a French Government Predoctoral Fellowship, Gustave Roussy Institute, Paris, France
1996-2000	Work on the identification, characterization and gene targeting of the murine homologue to human MN/CA IX gene, Forschungsinstitut für Molekulare Pharmakologie, Berlin, Germany

Teaching Experience

1989-1991	Teaching assistant for practical microbiology, Faculty of Science, Charles University, Prague, Czech Republic

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