8 Appendix

8.1 Abbreviations

ATP adenosine triphosphate
BoNT botulinum neurotoxine
BSA bovine serum albumine
CD circular dichroism
DTT dithiothreitol

EDTA ethylene diamine tetraacetic acid EPR electron paramagnetic resonance

FCS fluorescence correlataion spectroscopy

Fig figure

FRET fluorescence resonance energy transfer

G Gauss

HEPES N-(2-hydroxyethyl-)piperazin-N'-2-ethanesulfonic acid

IPTG isopropylthiogalactoside

kDa kilodalton

LB Luria Bertani (medium)

MALLS multi angle laser light scattering

NEM N-ethylmaleimide

NMR nuclear magnetic resonance NSF N-ethylmaleimide sensitive factor

OG octylglucoside

PAGE polyacrylamide gel electrophoresis

PBS phosphate buffered saline PCR polymerase chain reaction PMSF phenyl methyl sulfonyl fluoride

r anisotropy

rpm revolutions per minute

Syb synaptobrevin

SDS sodium dodecyl sulfate

SNAP soluble NSF attachment protein

SNAP-25 synaptosomal associated protein of 25 kDa

SNARE SNAP-receptor

Syx syntaxin

TeNT tetanus neurotoxine

Tris tris-(hydroxymethyl)-aminoethane

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8.3 Curriculum Vitae

Name: Martin Margittai Date of Birth: 12-14-1970 Place of Birth: Berlin **Nationality:** German

Schools:

1983-1991 Albert-Schweitzer-Oberschule

06-06-1991: Abitur

1988-1989 Exchange student at Seminole-High-School, Florida Biochemistry student at Freie Universität Berlin 1991-1997

> 01-30-1995: Vordiplom in biochemistry 01-10-1997: Diplom in biochemistry

1997-2001 PhD student at Max-Planck-Institute for Biophysical Chemistry

10-31-2001: Disputation at FU-Berlin

Research Experiences:

February-June 1989 Tampa Bay Research Institute, St. Petersburg, FL,

Dr. G. Litman, Characterization of Immunoglobulin Light

Chain Gene Clusters in Horned Shark

July-August 1989 Max-Planck-Institute for Molecular Genetics, Berlin

Dr. R. Hakenbeck, Penicillin-Binding Proteins in Intrinsic

Penicillin-Resistant Bacteria

July-October 1992 All Children's Hospital, USF, St. Petersburg, FL,

Dr. G. Litman, Identification of a New Type of Light Chain

Gene in Horned Shark

July-October 1993 All Children's Hospital, USF, St. Petersburg, FL,

> Dr. G. Litman, Application of PAC Cloning in Determining the Evolution of Immunoglobulin Genes in Horned Shark

and Pufferfish

Center for Human Genetics, Boston University, Boston MA, March-May 1995

> Dr. C. Amemiya, Introduction of High Molecular Weight-DNA into E. coli, DNA Purification by Triplex Affinity

Capture

MGH and Harvard Medical School, Boston, MA, June-August 1995

Dr. W. Driever, Brain Development in Zebrafish

June 1996-August 1997 Yale University, New Haven, CT

> Dr. R. Jahn, Labeling of Presynaptic Membrane Proteins with 3-(trifluoromethyl)-3-(m-[125]iodophenyl)diazirin

(diploma)

September 1997-Max-Planck-Institute for Biophysical Chemistry, Göttingen, October 2001

Dr. R. Jahn, Structural and Dynamic Studies of SNARE

Proteins Using Electronn Paramagnetic Resonance (EPR)-

and Fluorescence-Spectroscopy

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Publications or manuscripts in preparation that were used in this work are marked by an asterisk.