Science Signaling MAAAS

Supplementary Materials for

SH3 Domain–Based Phototrapping in Living Cells Reveals Rho Family **GAP Signaling Complexes**

Hirokazu Okada, Akiyoshi Uezu, Frank M. Mason, Erik J. Soderblom, M. Arthur Moseley III, Scott H. Soderling*

*To whom correspondence should be addressed. E-mail: s.soderling@cellbio.duke.edu

Published 29 November 2011, Sci. Signal. 4, rs13 (2011) DOI: 10.1126/scisignal.2002189

The PDF file includes:

Materials and Methods

Fig. S1. Expression levels of Rho family GAP SH3 domains and their interactors. Fig. S2. Identification of SH3 domain binding proteins by peptide array-based in vitro binding assay and coimmunoprecipitation. Fig. S3. Rho family GAP PI cluster interactomes and colocalization data.

Fig. S4. Gephyrin's interaction with WRP and colocalization with VIAAT.

Fig. S5. Endogenous gephyrin is highly colocalized with inhibitory synapse presynaptic marker VIAAT in vivo.

Reference

Supplementary Materials

SUPPLEMENTARY MATERIALS AND METHODS

Label-Free Quantitation of Free Style 293 lysate

Label-free quantitation and integration of qualitative peptide identifications was performed using Rosetta Elucidator (v 3.3, Rosetta Inpharmatics, Seattle, WA). Triplicate LC-MS/MS analysis of a Free Style 293 lysate were imported and subjected to chromatographic retention time alignment using the PeakTeller® algorithm. Quantitation of all detectable signals in the precursor MS spectra was performed within Elucidator by calculating peak height of the corresponding peptide level extracted ion chromatograms. Protein quantities were calculated using the average MS response from the two or three highest abundant peptides based on a modified strategy initially described by Silva et. al. (1). Absolute quantities were determined by normalizing MS response factors to that of yeast alcohol dehydrogenase spiked into the lysate at 50 fmol/ug.

Immunostaining of HBE cells

Culturing and transfection of Human Bronchial Epithelial (HBE) cells were as described for HEK293 cells. Immunostaining for HBE cells was also performed the same way as for HEK293 cells except for the use of 1% paraformaldehyde for fixation. The primary antibodies used for staining were polyclonal mouse anti-ARHGAP12 (Abcam, 1:100) and rabbit anti-ZO-2 (C-term) (Invitrogen, 1:100).

REFERENCE

1. J. C. Silva, M. V. Gorenstein, G. Z. Li, J. P. Vissers, S. J. Geromanos, Absolute quantification of proteins by LCMSE: a virtue of parallel MS acquisition. *Mol Cell Proteomics* **5**, 144-156 (2006).

Fig. S1.Expression levels of Rho family GAP SH3 domains and their interactors. (**A**) Schematic of vector used to express pBpa containing bait SH3 domains. (**B**) Relative levels of each SH3 domain bait after transfection. n=2. (**C**) Graph depicting the quantification of the most abundant proteins in the lysate of Free Style 293 cells to three orders of magnitude. **D**) Chart showing the number of PI cluster proteins identified in lysates. Only 10.8% of PI cluster proteins and one SH3 domain ligand were identified as abundant proteins in (C) using label-free LC/MS/MS quantification of Free Style 293 lysates.



Fig. S2. Identification of SH3 domain binding proteins by peptide array-based in vitro binding assay and coimmunoprecipitation. **A-I**) Proteins in Rho GAP SH3 domain-specific protein interaction (PI) clusters shown in Fig. 3A were searched for PXXP motifs. Peptides (18mer) containing the PXXP motifs were synthesized on cellulose membranes, incubated with purified GST-tagged wild-type Rho GAP SH3 domain, and immunoblotted with anti-GST antibody. The peptide array immunoblots were densitometrically quantified. The binding strength was normalized to the strongest interaction. **J**) HEK293 cells co-expressing palladin-GFP with vector or full-length wild-type SRGAP2-Flag were subjected to immunoprecipitation by Flag antibody. **K**) HEK293 cells co-expressing ARHGAP4 -Flag with GFP only or GFP-tagged full-length DIAPH1, were subjected to immunoprecipitation by GFP antibody. Co-precipitation was analyzed by Western blot analyses using indicated antibodies. Representative blots are shown from n=3.

Figure S2. ARHGAP26/SH3 - in Vitro Binding Assay

20 40 60 80 100

0

0 20 40 60 80 100



Figure S2. ARHGAP10/SH3 - in Vitro Binding Assay



QVEEDDRPELPWWKCKKW IPO7 GGYKFSAPVVPSSFNFGG

B

Figure S2. ARHGAP10L/SH3 - in Vitro Binding Assay

0 20 40 60 80 100

0 20 40 60 80 100

	EIIRVVHPHRPCKLALGS			NSTNFPEPSRPPLFTFRE	-
MYO1C	GFILRHAPRCPENAFFLD			IKSTLSAPTSPCSQSAPS	1
	NVLDTSWPTPPPALREAS	1		PSSGSSVPTTPTSSVSPP	1
MYO1B	SPIDKNWPSRPYLFLDST	1		LSLDLTSPAAPACLAPLS	
	ENPNLVMPPKPADRAAEW			TAVESCEDCADUUDOSES	
	AAAAGSGDEDDMAREMRT.	1		DIVSASSPGIEnneQASA	
FLII		1		SASSPGTPHHPQASAGDP	
	HADEDEMEDÖKTIKAGT	- La		DLGHREAPGPPPPPPTF	
	DLTALFLPRQPPMSLAEA		EHOD3	HREAPGPPPPPPPTFLGL	and the second se
TMOD3	ILPVFDEPPNPTNVEESL	1	PHOD3	APGPPPPPPPTFLGLPPP	
	LYVRKLSPVMPNPGNAFD	-		PPPPPPPTFLGLPPPPPP	1
LMO7	DVTRLPSPTSPFSSLSOD	1		DDDDDDT CT DDDDDDDT T	
	GSSDSVVPDL.PVPTTSAP	1		PPPFIELGLEFFFFFFFLL	
	35555577FDBF7F115AF			PTFLGLPPPPPPPLLDSI	
	AATTAGREDNEREFFRQQ			PPLLDSIPPPPVPGNLLV	
	EVTSSQPPPLPPPPPAQ	-b-		VPGNLLVPPPPVFNAPQG	
	SSQPPPLPPPPPAQETQ			QEAQLANPEIPLGSAEQF	1
	PPPLPPPPPPAQETQEPS			GKESGSSPAPPSOPOGLS	1
	PPOAOAPPRGPGSPAEDL			LCLEALODLODEDDDEDA	1
DBN1	AOAPPRGPGSPAEDLMEM	1		DODEADQFDQFEFFFFFA	
	FORUTARDUFDATTADATTE	-		EALQPLQPEPPPEPAFSE	
	Sent Composition and Composition			QPLQPEPPPEPAFSEAQK	1
	ASTLQGEPKAPTPPSGTE			ERPFRYGPRTPVSDDAES	-
	LDEVAPEPLLPAGEGCAT		LIMCH1	TVAFVEFPSSPQLKNDVS	1
	LLNFDELPEPPATFCDPE			LSQKVVKPKSPEPEATLT	
	EGESLAAPQTPTLPSALE			REHFOAGPESPCSPTPPG	1
	RDITTVIPOIPPDNANII			POLOPEODOCOPTITIO	1
	FSYDDI.DDSWDDOSTFDV	1		EQAGPESPESPTEPGQSP	-
DSG1	DIFICULTED			GPFSPCSPTPPGQSPNRS	-
	PVVSGHPPISPHFGIIIV	-		KKKRKVEPPTPQEPGPAK	
	VISESTYPSGPGVLHPKP			EEQQLPPPLSPPSPSTPN	
FLG2	LHPVLKNPDDPDTVDVIM			QLPPPLSPPSPSTPNHRR	
	QDADLKTPTKPKQHDQVS	1		PPLSPPSPSTPNHRRSOV	1
RAI14	TPKKRKAPPPPISPTOLS	1	MPRIP	DODENIES DOS DI DOS CA C	
	KRKAPPPPTSPTOLSDVS	1		RDF INEAPPAP DE DASAS	
	VCKUUKWDODDKUT BBEE	1		LPDASASPLSPHRRAKSL	
MYO1D	IGRAVRWPSPPRVLRRFE	1		GPADTHEPLRPEAEPGEL	
	GNYLASKPDTPQTSGTFV			RMEVDRSPGLPMSDLKTH	
SPTBN1	TDGEGYKPCDPQVIRDRV	1		LREEKQVPIAPVHLSSED	
	EEERKRRPPSPEPSTKVS	1		VSSGOATPTSPIKKFPTT	
	YNGGLYNPYGPRTPSECS	and the second se	PPP1R12A	TRLAVUADTIDERLASTS	1
	GLYNPYGPRTPSECSYYS	1		UNITED TOUS DELIVER S S	
MACF1	NHSCTSMPSSPATPASGT	1		VPIAVIIPVAPIVVNAAA	-
	CTANDOOD CONTRACT		MYL6B	KDVPVKKPAGPSISKPAA	
	CISMPSSPATPASGIKIS			PAKTKAEPAVPQAPQKTQ	1
	TMSKKTTTASPRTPGPKR			VSESTVPPSLPVDSVVIT	
MYH14	SVPGRKAPPRPGPVPEAA	<u>.</u>	AKAP9	DGTGQSRPPLPSEDLLKE	
	AQPFLFTPRGPSAGGGPG	a second s		LPFQNRYPGTPADFNPGS	1
	GRSSCEDPGCPRDEERAP	1			
HCK	KTETSASPHCPVYVPDPT				
	UDCMCCKDOKDWEKDAWE	1			
	VECHOORPUCKDAWE	-			
	MGAASSGPLPPPPPPPPP	-			
	ASSGPLPPPPPPPPSSD	-			
	GPLPPPPPPPLPPSSDTPE	1			
	PETVQNGPVTPPMPPPPP				
	VONGPVTPPMPPPPPPPP	1			
	COUTDOMODDODDDDDDDDDD	1			
	SE VIEFFIEFFFFFFFFFFFFF	1			
	TERMEREPEREPEREPE				
	MPPPPPPPPPPPPPPPPP				
EMAIL 2	PPPPPPPPPPPPPPPPPPP				
. mindled	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	1			
	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	1			
	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	1			
	COSSO DE LE CLEGENSEI V	1			
	GFARETVPAPPLAPPLPS				
	AETVPAPPLAPPLPSAPP	-			
	VPAPPLAPPLPSAPPLPG				
	PPLAPPLPSAPPLPGTSS				
	APPLPSAPPLPGTSSPTV				

С

Figure S2. ARHGAP9/SH3 - in Vitro Binding Assay

D 0 20 40 60 80 100 C22orf28 GSTRAFPPHHPLIAVDYQ MARPAPAPASPAARPFPH KIFC3 LSVDWAGPGSPHGLYLTL LQELRTKPAGPCPGCEHS PELO AGQVTLVPEEPEDMWHTY TTADGYAPEYPLPLIIKI DSC1 YKILQQIPDHPKHFSIHP KVQDQDLPNTPHSKAVYK EDFAVLKPVDPDGPENGP KIAA1826 VEEEERDPQSPEFEIEEE SRRENELPDFPHIDEFFT SMYD3 NGLRAVTPLRPGELLFRS KCLKSCKPRYPPDSVRLL RMISNADPSIPPPPRAPA SNADPSIPPPPRAPAPAP DPSIPPPPRAPAPAPPGT IPPPPRAPAPAPPGTVTQ PPRAPAPAPPGTVTQVDV VLTLRAKPPPPDEFLDCF EPS8 PKEQFIPPYVPRFRNGWE GPRPADTPPAPSPPPTPA PADTPPAPSPPPTPAPVP TPPAPSPPPTPAPVPVPL APSPPPTPAPVPVPLPPS PPPTPAPVPVPLPPSTPA TPAPVPVPLPPSTPAPVP

Figure S2. SNX26/SH3 - in Vitro Binding Assay

Ε

		0	20	40	60	80	100
	VSTLLOAPELPTKTRTSR	T					
	HRDTTDVPEMPHSKGQGE	-í					
	DHEPAVSPLLPRKERGPP	-[
	KKKKKTAPTPPKRSSSFR						
	GGHKSEKPALPRKRAGEN	٦					
ABL1	GTPAAAEPVTPTSKAGSG						
	GKLSRLKPAPPPPPAASA						
	SRLKPAPPPPPAASAGKA						
	VNSDAAKPSOPGEGLKKP						
	PGEGLKKPVLPATPKPOS						
	SAKPSGTPISPAPVPSTL						
PLUNC	TLPLNVNPALPLSPTGLA						
	MSETAPAAPAAAPPAEKA	1					
HIST1H1C	KKAGGTKPKKPVGAAKKP						
S100PBP	LIKVTVAPFNPTVCDALL						
	SORPDOGPORPPPEGLLP						
	PPPEGLLPRPPGDSGNOD						
PRR4	DDGPOORPPKPGGHHRHP	1					
	PGGHHRHPPPPPFONOOR	1					
	GHROLSLPRFPSVSLOEA						
	NIRNCEAPYIPEVSSPTD						
	NKAPTTCPVPPEOTKGPL	Ē		_			
CDC42BPA	ROOELMWPANPSSCCYNA	-í					
	IOILKDLPMNPRPOESRT	1					
	NSSNLSSPPSPASPRKTK	Ē					
	PRPVILDPADPTWDLGNG	-í					
	PVOSWKGPGLPRAGCSGL	-í					
	PRAGSKPPSCPAPGPTGA	-í					
OAS3	TGAASIVPSVPGMALDLS	-					
	PRPLVLDPADPTWNVGHG						
	PRPIILDPADPTGNLGHN						
	CMGRNGIPIQPWPVKAAV						
	EAPAOGSPPSPGEEALVP						
	PGEEALVPTFPLAKPPMN						
0000104	ASGTSEAPDCPTHPGLPG						
CSRNP1	TSEAPDCPTHPGLPGPGF						
	APDCPTHPGLPGPGFQPG						
	SLDNIEAPHFPLPGLSPP						
L DU UNICA	QVMNLLVPSLPNLVKNQL						
LPLUNCT	ALVLTPASLWKPSSPVSQ						
ELANE	EDNPCPHPRDPDPASRTH	1					
	RFGYGYGPYQPVPEQPLY						
	YGYGPYQPVPEQPLYPQP						
STATH	GPYQPVPEQPLYPQPYQP						
	QPVPEQPLYPQPYQPQYQ						
	EQPLYPQPYQPQYQQYTF						
	AKELSGLPSGPSAGSGPP						
CAP1	PSAGSGPPPPPPCPPPP						
	PPPPPPCPPPPVSTISC						

Figure S2. SRGAP2/SH3 - in Vitro Binding Assay (1/2)

F1

												1
0 2.0 4.0 6.0 8.0 1.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0 0.0									MEQKTVIPGMPTVIPPGL			
0 20 40 60 90 100 0 0.0 20 40 60 100 0 0.0 0.0 0.0 0.0 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0 0.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>RTGDLGIPPNPEDRSPSP</td><td></td><td></td><td></td></td<>									RTGDLGIPPNPEDRSPSP			
0 20 40 60 80 100 0 000									SDCKFORPGDPOSAODRA			
0 20 4.0 6.0 1 0 0.0									DI AGADDDAADAWNDDDD			
0 20 40 60 80 100 000000000000000000000000000000000000									PLAAAPPPAAPAAAPPPP			
0 20 40 60 80 100 0 00 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>PAAPANNPPPPPSLASTIQ</td> <td></td> <td></td> <td></td>									PAAPANNPPPPPSLASTIQ			
UNING UNDERSTORED DE DECEMPENT UNDERSTORED DE D		0	20	40	60	80	100		HGNHGGGPGGPGGGPHSF			
Constructions of the second seco		0		40	00	00	100		GHPMQHNPNGPPPPWMQP			
Construction C									MOHNPNGPPPPWMQPPPP			
PPENDEDUPER PETER		GLNQNRGPMGPGPGQSGP							PPPPWMQPPPPPMNQGPH			
USE IN CONTRACT DEPENDING CONTRACT DEPENDING		PGPGQSGPKPPIPPPPH							PPPMNQGPHPPGHHGPPP			
USEST LEPSTRONG DEPSTORE CONSTRUCTION OF PROCEEDING CONSTRUCTION OF PROCEEDING CONS		GOSGPKPPIPPPPHOOO							HOGEGMMEDEEMGMMEDE			
0F47 CONSTRUCTORY CONTROL Description 0F47 CONTROL CONTROL 0F47 CONTROL		CREPTIPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP							BODW//WWDDDDDDDDDDD			
CONTROL OF		OPRIPTIPPPPP WWWW						CE4	PPPHGPPIPPPPPPSGQP			
COPPOCIPEORPECTRUCTURE PRODUCTION PROVIDED PRODUCTION PROVIDED PRODUC		00000PPP00PPP00PPP						31.1	MGMMPPPPPPPSGQPPPP			
UPPORPEQUEPRING UPPORP		QQPPPQQPPPQQPPPHQP							PPSGQPPPPPSGPLPPWQ			
CPPSQPPPHingPNDD POPPORPHINGPNDD POPPO		PPQQPPPQQPPPHQPPPH							QPPPPPSGPLPPWQQQQQ			
COPPENDENTSPECTIONNERS COPPEN		QPPPQQPPPHQPPPHPQP							WQQQQQQPPPPPPPSSSM			
9490 OPENDOPENDOUSCO PUPEDODESTICATION BASSAFARTETICATION BASSA		POOPPPHOPPPHPOPHOO							QQQQPPPPPPPPSSSMASS			
9/P0 ADVIDUO DEPENDENTIES PURCEMPETER DA CONTRACTOR PURCEMPETER DA CONTR		ОРРРНОРРРНООРНОООО							OAAAAASPGAPOMOGNPT			
SPPD NATEAPOLOGOPTION USEPTITE SECTION STATEAPOLOGOPTION SECTION STATEAP		OBROOODBBBBBBBBBBBBB							OCNOMMUNT RECUORAT R			
VENDED CONTROLLED CONTROL CONT		MLUKNAMLLLLLMnopul.							WONE INVESTORATION OF THE			
SPP0 CVCUPUPERAPPEPERS SPP0 CVCUPUPERAPPERS SPP0 SPP0 SPP0 SPP0 <		PASSSAPPATPPTSGAPP							PLPPGVQPPLPPGAPPPP			
SPF0 NATEARCAPPEPERS DEDECARPERSENT NATEARCAPPEPERS DEDECARPERSENT NATEARCAPPEPERS DEDECARPERSENT SAVETTE DAGE CONSTRUCTION SAVETTE DAGE CONSTRUCTION SAVETTE DAGE CONSTRUCTION CONSTRUCTION CONSTRUCTION		GSGPGPTPTPPPAVTSAP							GVQPPLPPGAPPPPPPP			
CPSY CPSYDD: CPSCD200000000 CPSYDD: CPSCD20000000 CPSYDD: CPSCD200000000 CPSCD20000000000 CPSCD200000000000 CPSCD20000000000 CPSCD20000000000 CPSCD20000000000 CPSCD2000000000 CPSCD2000000000 CPSCD20000000000 CPSCD20000000000 CPSCD2000000000 CPSCD20000000000 CPSCD2000000000	SFPQ	PAVTSAPPGAPPPTPPSS							PLPPGAPPPPPPPPGSA			
PERSONTETENDAGEPS SAVETETENDAGEPS VETTENDAGEPS PROPERSONTETENDAGEPS VETTENDAGEPS PROPERSONTED CONTROLOGING CO		TSAPPGAPPPTPPSSGVP							GAPPPPPPPPPGSAGMMY			
SUPERING SUP		TPPSSGVPTTPPOAGGPP							MMYAPPPPPPPPPPMDPSNF	1		
VYTT PRANSPERTER VYTT PRANSPERTER VYT PRANSPERTER VYTT PRANSPERTER VYTT PRANSPERTER VYTT PRANSPERTER VYTT PRANSPERTER VYTT PRANSPERTER VYTT PRANSPERTER VYTT PRANSPERTER VYTT PRANSPERTER VYT PRANSPERTER		SSGUPTTPPOAGGPPPPP							GMPPEGMPPAPPPPPPON			
CHARGENERGENERGY CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGONE CARGONERGENERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENE CARGONERGENERGENERGENE CARGONERGENERGENERGENE CARGONERGENERGENERGENE CARGONERGENERGENERGENE CARGONERGENERGENERGENE CARGONERGENERGENERGENE CARGONERGENERGENERGENERGENERGENERGENERGENE		Upperpassion							VAARAUVDDDDDDDDDDDD			
CPSM CPCCDCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		VPTTPPQ//GGPPPP////V							IGGSSHIPPPPVPPPPPV			
CREATER CONTRACTION OF CONTRACT OF CONTRAC		TPPQAGGPPPPPAAVPGP							SHYPPPPPPPPPPPPPPPALPE			
CPDPDCDKCKNGCKNGCK GCDDPDCDKNCCKNGCKNGCK GCDDPDCDKNCCKNGCKNGCK GCDDPDCDCCGKEKK GCDCAPPCCACCASEKK GCDCACCASEKKK GCDCACCASEKKK GCDCACCASEKKK GCDCACCASEKKK GCDCACCASEKKK GCDCACCASEKKKK GCDCACCASEKKKKKK GCDCACCASEKKKKKKKKKK GCDCACCASEKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK		GPKQGPGPGGPKGGKMPG							GYSSSTTPAAPSSSGFMS			
GROOPROOMMODERFORD CREWERSNERSNERS CREWERSNERSNERS CREWERSNERSNERS CREWERSNERSNERS CREWERSNERSNERSNERSNERS CREWERSNERSNERSNERSNERSNERS CREWERSNERSNERSNERSNERSNERSNERSNERSNERSNERSN		QGPGPGGPKGGKMPGGPK							VLQPHHLPPPPLPPPPVM	23		
CREGENINCCORPUSED CREATERNAME		GPGGPKGGKMPGGPKPGG							HHLPPPPLPPPVMPGGG			
LITTOLINE CONTROLOGIESE CICCEDINGCONDUCTION CICCE		GPKGGKMPGGPKPGGGPG							PPPLPPPPVMPGGGYGDW	8		
CHRQCPPROPONDERSEE CLOREADINGCOPPONDERSEE CLOREADINGCOPPONDERSEE CLOREADINGCOPPONDERSEE CCOREFORMERCEPAGE COREFORMERCE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCEPAGE COREFORMERCE CO		T.STDOOUDVDDUROOOPD							CCVCDWODDDDDDDDDDDD		_	
CPREDUPTORYONNESS CONTROLOGAELAN CON		201 POORPROPERTO OUL							CONCORDED DODDODDODD			
CIGITEANDOUTPARTNERS CORRESPONDED GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER GOORPPERSONDER BEREICHTER GOORPPERSONDER GOORPPERSONDER BEREICHTER GOORPPERSONDER BEREICHTER GOORPPERSONDER BEREICHTER GOORPPERSONDER BEREICHTER GOORPPERSONDER BEREICHTER GOORPPERSONDER BEREICHTER GOORPPERSONDER BEREICHTER GOORPPERSONDER BEREICHTER BEREIC		QHHQGPPPGGPGGRSEEK							GDWQPPPPPPPPPPPPPPPPPP			
CUPRENDED PROFERENCE GEORGEPEPERAGYDERE REFERANCESEPEE REFERANCESEPEE REFERANCESEPEE REFERANCESEPEE REFERANCESEPEE REFERANCESEPEE REFERANCESEPEE REFERANCESE REFERAN		GIGYEANPGVPPATMSGS							PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP			
GGREPPERAGGSPEPF REFERENCES CRACECCOPPERAGGSPEPF CRACECCOPPERAGCES PPFRAGGZEPREPAG CPCATPERAPTION CRACECCOPPERAGCES PPFRAGGZEPREPAG CPCATPERAPTION CCPPERAFTER CRACECCOPPERAGE PPFRAGGZEPREPAG CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER PLODECPCCOPPEC PERAFTER PLODECPCCOPPEC PERAFTER CCPPERAFTER CCPPERAFTER PLODECPCPERAFTER CCPPERAFTER CCPPERAFTER PLODECPCPERAFTER CCPPERAFT		QGPRGMGPGTPAGYGRGR							PMELESPPESPPVPPGSY			
RFPCDALPRGPPPPPAG PPODITAPPOPPPSTYPP GPGGPPPPPAGTPPRIGT SGCYTLPAGPSGGPP GPPPPPPAGTPPRIGT SGCYTLPAGPSGGPP GPPPPPPAGTPPRIGT SGCYTLPAGPSGGPP GPPPPPPAGTPPRIGT SGCYTLPAGPSGGPP PRFLGPPCPPCPRCPC SGCYTLPAGPSGPP PRFLGPPCPPCPRCPRCP SGCYTLPAGPSGPPC PRFLGPPCPPCPCPRCPPC SGCYTLPAGPSGPPC PRFLGPPCPCPCPCPRCPPPC SGCYTLPAGPSGPPC PRFLGPCPPCCPRCPPC SGCSTPPSTPPC PRFLGPCPCCPCCPRCPPC SGCSTPPSTPPC PRFLGPCPCCPCCPCPC SGCSTPSTPPC PRFLGPCPCCPCCPCPC SGCSTPPSTPPC PRFLCPCCPCCPCCPCPC SGCSTPPSTPPC PRFLCPCCPCCPCCPC SGCSTPSTPPC PRFLCPCCPCCPCCPC SGCSTPPSTPPC PRFLCPCCPCCPCCPC SGCSTPPSTPPC PCCPCPCCPCCPCCPC SGCSTPSTPPC PCCPCPCCPCCPCCPC SGCSTPPSTPPC PCCPCPCCPCCPCCPC SGCSTPPCCPCCPCCPC PCCPCPCCPCCPCCPC SGCSTPPSTPC PCCPCPCCPCCPCCPCCPC SGCSTPPCCPCCPCCPC PCCPCPCCPCCPCCPCCPC SGCSTPPCCPCCPCCPC PCCPCPCCPCCPCCPCCPCC SGCSTPCPCCPCCPCCPCCPC PCCCPPPCCPCCPCCPCCPCCPCC SGCSTPCPCCPCCPCCPCC PCCCPPPCCPCCPCCPCCPCCPCC SGCSTPCPCCPCCPCCPCC PCCCPPPPCCPCCPCCPCCPCC SGCSTPCPCCPCCPCCPCC <t< td=""><td></td><td>GGDRFPGPAGPGGPPPPF</td><td></td><td></td><td></td><td></td><td></td><td></td><td>LESPPESPPVPPGSYMPP</td><td></td><td></td><td></td></t<>		GGDRFPGPAGPGGPPPPF							LESPPESPPVPPGSYMPP			
CPSGCCCPPPPFDACQTP CPSGCPPPFPACQTPPRPLO CPPPPFDACQTPPRPLO PFPACQTPPRPLOPCOP PACTOR PACTOR PFPACQTPPRPLOPCOP PACTOR PACTOR PRODUCTOR PRODUCTOR PRODUCTOR PRODUCTOR PRODUCTOR PRODUCTOR PRODUCTOR POLONO CPSGC CPSGCCCPPPCOP PACTOR CPSGCCCPPPCOP PACTOR CPSGCCCPPPCOP PRODUCTOR CPSGCCCPPPCOP PRODUCTOR CPSGCCCPPPCOP PRODUCTOR CPSGCCCPPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPPCOP PRODUCTOR CPSGCCCPPPCOP PRODUCTOR CPSGCCCPPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSGCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR CPSCCCCPPCOP PRODUCTOR PRODUCTOR PRODUCTOR CPSCCCCPPCOP PRODUCTOR P		RFPGPAGPGGPPPPFPAG							PSQSYMPPPQPPPSYYPP			
GPGGPPPPTAGCTPRPTAGCTPRPT GPPPPTAGCTPRRPTAGCTPRPTAGC PPPTAGCTPRRPTAGPTGPRG PACGTPRRPTAGPTGPRGPG GCTOPPEGPTAGPTGPRGPG PERFECTERCEPTCOPPCGCPPC PERFECTERCEPTCOPPCGCPPC PERFECTERCEPTCOPPCGCPPC PERFECTERCEPTCOPPCGCPPC REDPPTATEGOPFCGCPLCPL PPTTPCOPFCGPTCOPPLCPC PCGCPFCPCPCPCPPPPPP PCGCPCPCCPCPCPCPPPPPP PCGCPCPCCPCPC		GPAGPGGPPPPFPAGOTP							YPPTSSQPYLPPAQPSPS			
GPPPPPrActPression PPPPActPression GTPPPPPPAPPC GTPPRPLCPRCPC PPPCSPPPCPPPC PPCSPPPCPPPC PPCSPPPCPPPC GCPPPPCPPPCPC GCPPPPCPPCPC GCPPPCPPPCPC GCPPCPPPCPPCPC GCPPCPPPCPCPC GCPPCPPCPCPC GCPPCPPCPCPC GCPPCPPCPCPC GCPPCPPCPCPC GCPPCPPCPCPC GCPPCPPCPCPCPC GCPPCPPCPCPC GCPPCPPCPCPC GCPPCPPCPCPCPC GCPPCPPCPCPC GCPPCPPCPCPCPC GCPPCPPCPCPCPCPPPC GCPPCPPCPCPCPCPPPC GCPPCPPCPCPCPCPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPPCPCPCPPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPPCPCPCPCPPPPCPC GCPPCPCPCPCPCPPPPCPC GCPPCPCPCPCPPPCPCPPPPCPC GCPPCPCPCPCPCPPPPCPC GCPPCPCPCPCPCPPPPCPC GCPPCPCPCPCPPPCPCPPPCPC GCPPCPCPCPCPCPPPPCPC GCPPCPCPCPCPCPPPCPC GCPPCPCPCPCPCPCPPPCPC GCPPCPCPCPCPCPPPCPC GCPPCPCPCPCPCPPPCPC GCPPCPCPCPCPCPPPCPC GCPPCPCPCPCPCPPPCPC GCPPCPCPCPCPCPPPCPC GCPPCPCPCPCPCPPPCPC GCPPCPCPCPPPCPCPPPCPC GCPPCPCPCPPPCPCPPPCPC GCPPCPCPPPCPCPPPCPC GCPPCPCPPPCPCPPPCPC GCPPCPCPPPCPCPPPCPC GCPPCPCPPPCPCPPPCPC GCPPCPCPPPCPCPPPCPC GCPPCPCPPPCPCPPPCPC GCPPCPCPPPCPPCPCPPPC GCPPCPCPPPCPCPPPCPC GCPPCPCPPPCPCPPCPC		GPGGPPPPPPAGOTPPPP							SSOPYLPPAOPSPSOSPP			
DPPPRACTPREPLAPEDDESCRIPTIONDAGTTPREPLAPEDCLAPPEPRACTOREQCTPREPLAPEDAGECLAPPEPRACTOREDAGTTPREPLAPEDAGECLAPPEPRACTOREDEGEORGEPERCEPERESTATIONDEGEORGEPERCEPERESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEPERCEESTATIONDEGEORGEPERCEESTATIONDE		CREATER COTTREE							LPSSOASPSRPSOGHSKS			
PPPYAGQTPYRPLOPPG PAGCTOPROPLICAPEOPG QTDPRAPLICAPEOPGPG PRECEDOPGOPGPG PRECEDOPGOPGPG PRECEDOPGOPGOPGPG PRECEDOPGOPGOPGOPG PPNECUPPCIPS PPNECUPPS PPNECUPPS PPNECUPPS PPNECUPPS PPNECUPPS PPNECUPPS PPNECUPPS PPNECUPS PPNECUPPS PPNECUP		GPPPPP PAGQI PPRPPDG							areout appendance			
PAGUTPERPULGPEQPEQ QTEPREPLGPEQPEQPEQ PREPLGPEQPEQPEQPE PLGPEQPEQPEQPEQPE PLGPEQPEQPEQPEQPE RGDRPPPVLFPCQFCQPLCPL PPVLFPCQFPCQPLCPL PPVLFPCQFPCQPLCPL PPVLFPCQFPCQPLCPL PPVLFPCQFPCQPLCPL QTPPQPPLGPLFPCQPPLC GTPCFPLGPLFPCPPPP PGQPPUGPUGPPPCCC GTPCFPLGPLFPCPPPPVCCC GTPCFPLGPLFPCPPPPVCCC GTPCFPDPPVCCC GTPCFPPPPVCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPPCCC GTPCFPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPPCCC GTPCFPPPCCC GTPCFPPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPPCCC GTPCFPPCCC GTPCFPPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPCCC GTPCFPPCCC GTPCFPPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCC GTPCFPCCCC GTPCFCC GTPCFPCCCC GTPCFCCCCC GTPCCCCC GT		PPFPAGQTPPRPPLGPPG							SKSULLAPPPPOAPPOAK			
CPSF PROFERENCESSEEPEL PROFESSEEPELEPOSPORT PROFESSEEPELEPOSPORT PROFESSEEPELEPOSPORT PROFESSEEPELEPOSPORT PROFESSEEPELEPOSPORT PROFESSEEPELEPOSE PROFESSEE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELEPOSE PROFESSEEPELE PROFE		PAGQTPPRPPLGPPGPPG							QLLAPPPPSAPPGNKTTV			
PREPLAPPOPROPOROPOROP ESPASEEPPLAPPONETVP PLAPPOPROPOROPOROPOROP PPNNEUVPPLAPPOPREOS RGDRPPPVLFPOOROPCOPLOPL YLFM PPVLFPOOROPCOPLOPL PPOLTAATVPASSOSS GOPFOOPLOPLOPOROPOROP PPOLTAATVPASSOSS GOPFOOPLOPLOPOROPOROPOROP SCCGOPREONPORT GOPFOOPLOPLOPOROPOROP RSSULSSPRONTAUT GOPFOOPLOPLOPOROPOROPOROP SCCGOPREONPOROPOROPOROPOROPOROPOROPOROPOROPOROPO		QTPPRPPLGPPGPPGPPG							VPATSQVPESPSSEEPPL			
PLGPCPCpCPpCppCppCppCpp PDVRCGPPCQPPCGPPC RGCRPPPPVLPPCQPFCQPPC RGCRPPPPVLPPCQPCQPCCPC PPVLPPCQPCQPFCQPLCPL PPVLPPCQPCQPFCQPLCPL PPVLPPCQPCQPFCQPLCPLPPC GCPFCQPFCQFPLCPFPPPPP PCCPPPVLPPCQPPCQPPCCPC PCCPTCPPCPPCPPPPPPPPPP PCCPPPVCPPCQPPPCCPC PCCPTCPPPCQPPPPCCPC PCCPTCPPPCQPPPPCCPC PCCPTCPPPCQPPPPCCPC PCCPTCPPPCQCPPPPCCPC PCCPTCPPPCQCPPPPCCPC PCCPTCPPPCQCPPPCCPC PCCPTCPPPCQCPPPCCPC PCCPTCPPPCQCPPPCCPC PCCPTCPPPCQCPPPCCPC PCCPTCPPPCQCPPPCCPC PCCPTCPPPCQCPPPCCPC PCCPTCPPPCQCPPPCCPC PCCPTCPPCQCPPPCQCPPPC PCCPTPPCQCPPPCQCPPPC PCCPTPPCQCPPPCQCPPPC PCCPTPPCQCPPPCQCPPPC PCCPTPPCQCPPPCQCPPPC PCCPTPPCQCPPPCQCPPPC PCCPTPPCQCPPPCQCPPC PCCPTPPCQCPPPCQCPPC PCCPTPPCQCPPPCQCPPC PCCPTPPCQCPPPCQCPPC PCCPTPPCQCPPPCQCPPPC PCCPTPPCQCPPPCQCPPC PCCPTPPCQCPPPCQCPPC PCCPTPPCQCPPPCQCPPC PCCPTPPCQCPPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPCQCPPC PCCPTCPCQCPPCQCPPCQCPPCQCPC PCCPTCPCQCPCQCPPCQCPPCQCPPCQCPPCQCPCCPCQCPCQ		PRPPLGPPGPPGPPGPPP							ESPSSEEPPLPPPNEEVP			
PPNEGREPPPVLFYGQPPVLFYGQ RGDRPPPVLFYGQPFQGPU PPVLFYGQPFQGPUGP PPVLFYGQPFQGPUGPU PPVLFYGQPFQGPUGPU GGPFGGPPLGPLPFGGPP GGPFGGPPLGPLPFGGPP GGPFGGPPLGPLPFGGPP FGGPFGGPPLGPLPFGGPP GGPFGGPPLGPLPFGGPP PPGGPAGPPFGGPP PPGGPAGPPFGGP PPGGPPPGGP		PLGPPGPPGPPGPPPGQ							PPNEEVPPPLPPEEPQSE			
RGDRPPPVLPRQIPPQIPVLPPQIPVLPPQIPVQFQPPQ IAATTPPQIPPQIPPQIPPQIPPQLPPQIPVQFQPPQ PPUTPCQPPCQPPLQPLPPGPPPQPQ PPUTPQIPPQUPPVQFQPPQLSD CP346 OCPFCQPPLQPLPQPPQPPVPQCFQ PPLDPLPPQPPVQCPPLQPP VLPMI PPLDPQPPVQCPPLQPPQCFQ VLPMI PPLDPQPPVQCPPLQPPQCFQ RSTLSPPQCPPVQCFPQ PPLDPQPPVQCPPQCFPQ VLPMI PPLDPQPPPQCGPPPQCFP VLPMI PPLDPQPPPVQCPPQCFPQ VLPMI PPDCPPPQCGPPPQCFP VLPMI PPDCPPPQCGPPPQCFP VLPMI PPDCPPPQCGPPPQCFP VLPMI PPDCPPPPQCGPPPQCFP VLPMI PPDCPPPPQCGPPPQCFP VLPMI PPDCPPPPQCGPPPQCFP VLPMI PPDCPPPPQCGPPPQCFP VLPMI PPDCPPPPQCGPPPQCFP VLPMI PPDCPPPPQCGPPPQCFP VLPMI PPDCPPPPQCGPPPPQCFP VLPMI PPDCPPPPQCGPPPPQCFP PPGRDRPPPCGPPPQCFP PPDCPPPPQCFPPPQCFP PPGRDRPPCGPPPQCFP PPDCPPPPQCFPPPPQCFP PPGRDRPPCGPPPQCFP PPDCPPPQCFPPPPQCFPPPQCFP PPGRDRPPCGPPPQCFP PPDCPPPPQCFPPPQCFP PPGRDRPPCGPPPQCFP PPDCPPPPPQCFPPPQCFPPPQCFP PPGRDRPPQCFPPQCFP		PPNRGDRPPPPVLFPGOP							EVPPPLPPEEPQSEDPEE			
RPPPULPAPOLPEQDPLCPL PPULPAPOLPEQDPLCPL PPULPAPOLPEQDPLCPL GOPFOCPLAPLPAPOLPEQ GOPFOCPLAPLPAPOLPEQ GOPFOCPLAPLPAPOPPUPACG GPLEDLPEQDPPUPACG PPOLPAPOPACG PPOLPAPOPPUPACG PPOLPAPOPPUPACG PPOLPAPOPPUPACG PPOLPAPOPPUPACG PPOLPAPOPAPOPPUPACG PPOLPAPOPPUPACG PPOLPAPOPPUPACG PPOLPAPOPPUPACG PPOLPAPOPPUPACG PPOLPAPOPACG PPOLPAPOPPUPACG PPOLPAPOPAPOPPUPACG PPOLPAPOPP		RGDR DRDDVT. FRGOREGO							IOATTPPPGIPPPGVPOG			
NPPPYUFUEQPPCOPPLOE YLMM PPUTFUEQPPCOPPLOE YLMM PPOTFAAPVPEARSSORS SQGSQVPEKPRALLPF CP360 PPLCPLPGOPPCOPLOE PPLCPLPGOPPCOPPLOE VASCCLIDDPRSSYLES CP360 PPLCPLPGOPPOPPAGE PPLCPLPGOPPOPPAGE RSYLEPPEGPREPAGER PPLCPLPGOPPOPPAGE RSYLEPPEGPREPAGER PPLCPLPGOPPOPPAGE RSYLEPPEGPREPAGER PPCOPPAGELPPEPOPPAGE RSYLEPPEGPREPAGER PPCOPPPOCOPPPOC RSYLEPPEGPREPAGER PPCOPPPOCOPPPOC RSYLEPPEGPREPAGER PPCOPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER PPCOPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER CVGCPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER PPPCOPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER CVGCPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER CVGCPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER PPPCOPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER CVGCPPPOCOPPPOCOPPPOC RSYLEPPEGPREPAGER PPPCOPPPOCOPPPOCOPPPOC PYHROR PPPCOPPPOCOPPPOCOPPPOC PYHROR PPPCOCOPPPOCOPPPOCOPPPOC PYHROR PPPCOCOPPPOCOPPER PYHROR PPPCOCOPPPOCOPPPOCOPPER PYHROR PPPCOCOPPPOCOPPER SUVERTREPAGER PPCOCOPPPOCOPPER SUVERTREPAGER PPCOC		DEPENDENCE POLICE							PRPGT PPPGVPOGT PPOT			
PPULFRCpPCQPDDGPLGPL LFPCQPFQCPLDPLPPC GQPFQCPLDPLPPC GQPFQCPLDPLPPGPPPVBCTG PGQPDUCLPPGCPPVVBCTG GPLDCDPPGCPPVDCTG GPLDCDPPGCPPVDCTG PPCCPPPCQCPPDPCCPP PCCPPPCQCPPPDCPCPP PCCPPPCQCPPPDCPPPC GCCPPCQPPDCPPPCQCPP PVCCQPPCCPPPCCPPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCQCPPCPCFPP GCCPPCQCPPPCPCFPP GCCPPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCQCPPPCPCFPP GCCPPCQCPPPCPCFPP GCCPPCPCQCPPCPCFPP GCCPPCQCPPCPCPPCFPP GCCPPCPCQCPPPCPCFPP GCCPPCQCPPPCPCFPP GCCPPCQCPPPCPCPPPCQCPP PPCQCPPPCQCPPPCPCFPP GCCPPCPCPPCQCPPPCPCFPP GCCPPCQCPPCPCPPCFPP GCCPPCQCPPCPCPPCPCFPP GCCPPCQCPPCPCPPCPCFPP GCCPPCQCPPCPCPPCQP PPCQCPPPCQCPPPCQPPCQP PPCQCPPPCQPPCQPPCQP PPCQCPPCQPPCQPPCQP PPCQCPPCPCPPCQP PPCQCPPPCQPPCQPP PPCQCPPCQPPCQPPCQP PPCQCPPCQPPCQPPCQP PPCQCPPCQPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPPCQP PPCQCPPCQP PPCQCPPCQP PPCQCPPPCQ PPCQCPPPCQP PPCQCPPCPCQP PPCQCPPPCQP PPCQCPP		KEPPPVLFPGQPFGQPPL							protectore			
LFPGQPPLGPLPGPLPGPPGPP GOPFGQPLGPLPGPPGPP PGQPLGPLPGPPGPPFGPG GPJGPLGPLPGPPGPPGGGP PPLGPLPGCPPGGPPFGGP GPLGPLPGCPPFGGPPGGGPP PGPGPPPGGGPPFGGPPGGP GPGFGGPPFGGPP		PPVLFPGQPFGQPPLGPL						YLPM1	PPULTAAPVPPA555055			
GOPFOGPELGREPGPEPP FOGDPELGREPGPEPPPP FOGDPELGREPGPEPPPPTOGT GPLEDGPEPPTOGTG PPCTPGPEPPTOGTG PPCTPGPEPPTOGTG PPCTGPPEQPPTOGTGP PPCTGPPEQPPTOGTGPEPPC PPCTGPPEQPPPCGGPPPPCG CCPEPPCGGPPPPCGGPPPPC CCPEPPCGGPPPPCGGPPPPC CCPEPPCGGPPPPCGGPPPPC CCPEPPCGGPPPPCGFPP PPCGGPPPPCGGPPPPCG PPCGGPPPPCGGPPPPCG CCPEPPCGGPPPPCGFPP CCPEPPCGGPPPPCGFPP CCPEPPCGGPPPPCGFPP CCPEPPCGGPPPPCGPPPC CCPEPPCGGPPPPCGPPPCG		LFPGQPFGQPPLGPLPPG							SSQSSQVPERPRPALLPT			
POQPELGELPRGPPRPTY VNSCCLDPDPROPSYLES CPSF PLCELPRGPPRPTYCKG RSYLEPRGPRPTQRRR GPLFGELPRGPPPTYCKG SCCCGPRPRGPREGRRP SCCCGPRPRGPREGRRP PPPTPPTYCKGPPPGGPP PRFEGRRPGGREGRRP PPPTPTYCKGPPPGGPPP RSYLEPRGPRPTYCH PPPTPTYCKGPPPGGPP RSYLEPRGPRTYCH PPPTCKGPPPGGPPPGGP RSYLEPRGPTYCH PPTCKGPPPGGPPPGGP RSYLEPRGPTYCH CYGGPGPPPGGPPPGGP GRERGL PPTCKGPPPGGPPPGGPP PYRCKGPPFGGERGERGL GPTCPPFPFPFFFF GRERGL PPTCGPPPGGPPFFFFFFFFFF GRERGL CGPPPFGGPPPGGPPFFFFFFFFFFFFFFFFFFFFFFFF		GQPFGQPPLGPLPPGPPP							LGESSAAPSQPITAVKDM			
CPSF6 PPLGPLPPCPPPPVPCYG R8SYLESPRGPRPDQPRR CPSF6 CPLPAGPPPVPCYGPPPPCPG SRCEGPRFKGRFLQPRR PPPPVPGYGPPPOGPP PPFGRRPDGPRPC RSKNCHTRGPAGPYTT PPPPVPGYGPPPPOGPP RSKNCHTRGPAGPYTT PPPCGYGPPGPPPOGGP RSKNCHTRGPAGPYTT PPPCGYGPPGPPPOGGP RSKNCHTRGPAGPYTT PPCGGPPPPOGGPP GRERGPPRGGASERAL CPPPOGCGPPPPPGG DFGRDGPFREPGGGZ PPCGGPPPGCGPPPRPP OFRENITELPPLPLPL CGPPPPOGCPPPRPPP OFRENITELPPLPLPPLPPLPPLPPLPPLPPLPPLPPLPPLPPLPPL		FGQPPLGPLPPGPPPVP							VRSGGLLPDPPRSSYLES			
GPLPPGPPPDFGXGPPGGPP SRCGGPPPGGPREGRRP PPGPPPPGXGPPGGPPGGP PREGRRPGGPREGRRQ PPPGYPPGGPPPGGPP KSRNGLIPAGDAGRENGL GYGPPGGPPPGGPP GGRERGPREGRRPGGRENGL GYGPPGGPPPGGPP GGRERGPREGRGGRENGL PPGGPPPPGGPPPGGP GGRERGPREGRGGRENGL GYGPPGGPPPGGPP PFGRBGGPREGGCGE GYPPGGGPPPPGGPP PFGRBGGPREGGCGE GPPPGGGPPPFGFPRPFGF OFREDISLPLPLPPLFELPLFG GGPPPGGGPPFPRPFGGLGPLIL PFGGSXPPPARSXP PFILGGPFGAPPA SSVPVTRPVPIPPGSP PFILGGPFGAPPA SSVPVTRPVPIPPGSP PFILGGPFGAPPA SSVPVTRPVPIPPGSP PFILGGPFGAPPA VTRPVVIIPPPPPPPPPPP SSSRGPPPTOYGRAPPA PFFILGEPFGAPPA PFILGGPFGAPPA SSVPVTRPVPIPPPPPPPPPPPPP SSSRGPPPTOYGRAPPA PPDFPPLFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	CPSF6	PPLGPLPPGPPPPVPGYG							RSSYLESPRGPRFDGPRR			
PPCPPPVPGYGPPGPP PPPVGYGPPGPPGGP PPPCGYPPGPPGGP GYGPPPGOGPPPGGP GYGPPPGOGPPPPGGP GYGPPPGCPPPFGGPGPPGG PPCGGPPPFGCPFPP PPCGGPPPFGCPFPPF GGPPPFGCPPFPRFPG GPPPFGCPPFPRFPGL PPCGGPPPFGCPFPF PPCGCPPPFGCPFPF PPCGCPPPFGCPFPF PPCGCPPPFGCPFPF PPCGCPPPFGCPFPF PPCGCPPFFCCPC GPPPFGCPPFPRFPGL PPCGCPPFFCCPC SUPULATION COPPFGCPPFPRFPGL PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCPPFFCCPC PPCGCCPC PPCGC		GPLPPGPPPPVPGYGPPP							SRCEGPRPKGPRFEGNRP			
PPPPYPYGYGPPPOGPPPQGP KSKKCHIPRGPAPPYGY PPPCYGYGPPPOGPPPQGP KSEVSGCPVPESHNDQNY CYGPPPGGPPPQGPPPGGP GSRENGL PPPGPPPGGPPPGGPP DFGRDRGPFREPGCGG GPPPGGCPPPPGPP PPGRDRGPFREPGCGG GPPPGGCPPPPGPP PPGRDRGPFREPGCGG GPPPGGCPPPPGPP PPGRDRGPFREPGCGG GSPPPGGPPPGGPP PPGRDRGPFREPGGG GSPPPGGPPPGGPP SSPPIDPPCPLPPL GSPPPGGPPPGGLGPPID PPGSYRPPGGLGPLDINY PCPPPRPGGLGPPID PPGSYRPPGGS PLTLAPPRLEGPPGAPPA SSVPYRPPVDIPSPPGP PPHLGGPPGAPPA SSVPYRPPVDIPSPPD PPHLGGPPGAPPA VTRPVDIPSPPD PPGASTRPPA VTRPVDIPSPPD PPGASTRPPA PPFDFSTRPPGSL SSSPYRPPVNRA PPFDFSTRPPGSL PPSGASPPA SSVPYRPPVDIPSPPD PPSGASPPA SSVPYRPPVDIPSPPD SSSRGPPPTDYYGRPPPY SSSRGPPTDYYGRPPY SSSRGPPPTDYGRPPY IPSAPULPPPYNSIPP PPSASTRPPS PPSASTRPPPVNSIPP SSSRGPPPTDYGRPPY IPSAPULPPPYNSIPP PVMSSIPPFGVMSNPP PVMSSIPPFGVMSNPP		CPEPPOPPPPPPPOIGPPP							DRFFONRDDODRDRVFOR			
PPPPVBCKGPPGPPPGQGP PVFCKGPPGPPPPQQGP GYGEPPGQGPPPPQQG PPPGPPPQQGPPPPGQG GPPPPQQGPPPPGQF PPQGPPPPQGPPPRGP GPPPDQCPPPPRGPL PPQQGPPPPGQFPPRGQL PPPQGPPPPRGPL PPPQGPPPPRGPL PPPGGICPPCAPP PCPPPRPGQLAPPLAP PCPPPRPGQLAPPLAP PCPPPRPGQLAPPLAP LAPPPLLPCPPCAPPA PPGSICPPPCAPPAR PCPPPRPGPCAPPPA PPGSICPPCAPPAR PCPPPRPCQLAPPLAP PPGSICPPCAPPAR		PPGPPPPVPGIGPPPGPP							PAPUANT DECEMPATIN			
PVCCGCPPPEQCPPPEQCEP GCGCPPPEQCEPPPCGCP PPEQCPPPEQCPPPEQC GCPPPPCGCPPPEPCF PPEQCPPPEQCPPPECF GCPPPPCGCPPPPCFP CGPPPPCGCPPPPCFP CGPPPPCGCLCPPLC CGPPPPCGCLCPPLC CGPPPPCGCLCPPLC PCCPPPPCGCLCPPLC PCCPPPPCGCLCPPLC PCCPPPPCGCLCPPLC PCCPPPPCGCLCPPLC PCCPPPCCCCCPC PCCCPCCPCCCCCCCCCC		PPPPVPGYGPPPGPPPPQ							Kokwoniekoenoveiii			
GYGPPGPD9PQGPPPGG PPCGPPPGGPPPGGP GPPPGCPPPPGPP PPQGPPPPGPPPGP GPPPGCPPPPGPP GPPPGCPPPPGPP GPPPGCPPPPGP PPGGPPPFGPF PPGGPPPGPF PPGGIVPPGC PPGGIVPFC PFGGIVPFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGGIVFC PFGG		PVPGYGPPPGPPPPQQGP							KSEVSEGPVEPSNWDQNV			
PPCOPPPCOCOPPPCPS GPDPPCOCPPPPCPPC OCPPPPCOCPPPCPPRPP OCPPPPCOPPPRPP OCPPPPCOPPPRPP OCPPPPCOPPPRCSL OCPPPPCOCPPPRCSL OCPPPPCOCPPCCS PPCCSTRPPCCSLCPLI PCCPPPCOCLCPLI DPCCSTRPPCCSLCPLI PCCSTRPPCSLCPLI PCCSTRPCSLCPLI PCCSTRPCSCCSTRPCSLCPLI PCCSTRPCSLCPLI PCCSTRPCSCCSTRPCSCCSTR		GYGPPPGPPPPQQGPPPP							GSRERGPPRGPGSRERGL			
GPPPPOGPPPGFPPPGFP PPOGPPPGFPPFPFGPL OGPPPGFPFPFFGI PPPGGPPPGFPFFFGI PPPGGPPPGFPFFFGI PPPGGPPGFPFFFGI PGPFDGPFGAPPGAP PGFPGPGAPPGAP LAPPFLLGGPPGAPPGAP PJCLAPPHLPGPFGAPPGAP PJCLAPPHLPGPFGAPPGAP PJCLAPPHLPGPFGAPPGAP PJCLAPPHLPGPFGAPPGAP PJCLAPPHLPGPFGAPPGAP PJCLAPPFAPHNPA PJCLAPPGAPPAPHNPA PJCLAPPGAPPGAPPAPHNPA PJCLAPPGAPPGAPPGAPPAPHNPA PJCLAPPGAPPGAPPGAPPAPHNPA PJCLAPPGAPPGAPPGAPPAPHNPA PJCLAPPGAPPGAPPGAPPAPHNPA PJCLAPPGAPPGAPPGAPPGAPPGAPHNPA PJCLAPPGAPPGAPPGAPPGAPPGAPPGAPHNPA PJCLAPPGAPPGAPPGAPPGAPPGAPHNPA PJCLAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPHNPA PJCLAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPHNPA PJCLAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPHNPA PJCLAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPPGAPP		PPPGPPPPOOGPPPPPGP							DFGRDRGPFRPEPGDGGE			
PPQQGPPPPGGPPPRPP OPRENDIPELPPLPPI CGPPPPGGPPPRPGGL RDIPSIPPLPPLPPLPPLPPL CGPPPPGGLQPP SLPPLPPLPPLPPLPPLPPLPPL PGFPPRPGGLQPP PPGGXTPPPRMSKPPGS PLTLAPPHLGCPPCAPPA PPGGXTPPPPMSKPPGS PHLGCPPCAPPAPPA VTRPPVPIPPDPDPD PHLGCPPCAPPAPPA VTRPPVPIPPDPDPD PFGLSTPPPMPK VTRPPVPIPPPPPPPP PPGCAPPPAPPA VTRPPVPIPPPPPPP SDSRGPPPTDPYGRPPPY KSETAITSATUPPPY SDSRGPPPTDPYGRPPPY PVSSIPPGQVBMAPP PVSSIPPGQVBMAPP PVSSIPPGQVBMAPP		CREPPROCEPERED							PYHRDEPPRAPWNHGEER			
CGPPPPGGPPPRgCpLgpP PGPCPPPgCgPpPgCgLgpP PGPPpRgCgPpgRgCpLGpP PGPPpRgCgPDgCgP PGPPpRgCgPDgCgP PGFLgpPgCgPpgAp LAPPPHLgCPPGAPPAA PFHLGCPPGAPPAAPPA PGFLgPPGAPPAAPPA LPGPPGAPPAAPPAA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPPGAPPAAPPA PGCgPGAPPAAPPA PGCgPGAPPAAPPA PGCgPGAPPAAPPA PGCgPGAPPAAPPA PGCgPGAPPAAPPA PGCGGPGGPGAPPAAPPA PGCGGPGGPGAPPAAPPA PGCGGPGGPGAPPAAPPA PGCGGPGGPGAPPAAPPA PGCGGPGGGPGGPGAPPAAPPA PGCGGPGGGPGGPGAPPAAPPA PGCGGPGGGPGGPGGPGGGPGGGPGGGPGGGGGGGGGG		BBOOGBBBBBBBBBBBBBBBBB							OFRERDIPSLPPLPPLPP			
OGPPPPOOPPROPSIL BLPPLPPLPPLDPLDRYR PGPPDROPPROLGPP BLPPLDPLDRYR PGCPPDROPCDLCPPLTL PPGCSYRPPPARASSYP LAPPHLIGCPPCAPPARASYP SSVEVTROPVDIDPOPDP PHILDCOPPCAPPARAWNA VTRDPVDIDPDPDDPD PPGCAPPDAHNNA PVDIDPDPDPDPDPDPDP PPGCAPPDAHNNA PVDIDPDPDPDPDPDPPVIKOT SDSRGPPPTDPYGRPPPY RSETAIDEATLIPPPY SDSRGPPPTDPYGRPPPY PVSSIDPDGVBMADP PVSSIDPDGVBMADP PVSSIDPDGVBMADP		PPQQOPPPPPOPPPKPP							POT DOT. DDT. DDT. DDT. DDT.	_	-	
PPPEGPPPRPGLGPP PGPPPRPGLGPP PGPPPRDFGLGPE PLTLAPPPHLDGPPGAP LAPPPHLDGPPGAPPFA PHLGOPPGAPPAAPPA PPHLGOPPGAPPAAPPA PPHLGOPPGAPPAAPPA PPHLGOPPGAPPAAPPA PPEGPPGPPGPPGPP PPGLAPPAAPHVNDA PPDPGAPPAAPHVNDA PPDPGAPPAAPHVNDA PPPGAPPAAPHVNDA PPPGAPPPAPPY SDSRGPPPTDPYGRPPPY PVHSSIPPGQPVBMGNPP PSLSHQDPPARPVEKKPE		QGFFFPPGFFFPRPGPL							ST. DDT. DDT. DDT DDT DDT DDT			
PGPPPRPcQLCPLL PPGSTRPPPMRKPPGS PLTLAPPHLEGPPGAP PPGSTRPPPMRKSVP LAPPHLEGPPGAPPA SSVPTRPPVDIPPPPP PHLPGPPGAPPAPHV VTRPPVDIPPPPPP PPGCAPPAPHVNPA PVDIPPPPDPPDPPDPP PPGCAPPAPHVNPA PVDIPPPPDPPDPVIKQT SDSRGPPPTDPYGRPPPY RSTAIDSAPULPPPV SDSRGPPPTDPYGRPPPY PVSSIPPGQVBMGNPP PVSSIPPGQVBMGNPP PVSSIPPGQVBMGNPP		PPPPGPFPPRPPGPLGPP							OPEFTEEPEPEPEPER			
PLTLAPPPHLPGPPGAP LAPPPHLPGPPGAPPGAP LAPPPHLPGPPGAPPA PHLIGOPPGAPPAAHY UTRDPVJIOPDPDPDPL PHLGOPPGAPPAAHY LPGPPGAPPAAHYNPA PDPGAPPAAHYNPA PDPGAPPAAHYNPAFP SDSRGPPPTDPYGRPPPY SDSRGPPTDPYGRPPPY PDFGAPPAAHYNSIPPG PSLSHQDPPARPYEKKPE		PGPFPPRPPGPLGPPLTL							PPPGSYRPPPPMGKPPGS			
LAPPPHLPGPPPGAPPPA PHLPGPPPGAPPAPA PPHLPGPPPGAPPAPAPA LPGPPGAPPAPAPA PPpCAPPAPAPANNA PPpCAPPAPAPHNAA SDSRGPPPTDPYGRPPPY SDSRGPPPTDPYGRPPPY PPHSIPPGPVBGPPP PVHSIPPGPVBMGNPP PSLSPQPPARVEKKPE		PLTLAPPPHLPGPPPGAP							PPGSIVRPSAPPARSSVP			
PPHLPGPPPGAPPPAPHV LPGPPGAPPPAPHVNPA PPDGAPPGAPPPAPHVNPA PPDGAPPDAPHVNPAFP SDSRGPPPTDPYGRPPPY SDSRGPPPTDPYGRPPPY PPHSENOPDPYGRPPY PPHSENOPDPYGRPPY PPSLSNOPDPAPRVEKKPE		LAPPPHLPGPPPGAPPPA							SSVPVTRPPVPIPPPPP			
LPGPPPGAPPARHNNA PPGIPPGAPPARHNNA PPGAPGAPFARHNNA PPGAPGAPFARHNNA SDSRGPPFDPGPGPFY SDSRGPPPTDPGRPPPY PVHSSIPPGGVGMMAPP PSLSPPGGVGMMAPP SDSRGPPCKKPE		PPHLPGPPPGADDADU							VTRPPVPIPPPPPPPPP			
DPPERDAPHYDRAFFP PPPPPPP SDSRGPPPTDPYGRPPPY RSETALIPSAPULPPPPV SDSRGPPPTDPYGRPPPY ISSIPP PVH351PPGPV9MGMPP PSLSHQPPPAPVEKKPE		T DODDOC DDDD DUDDD							PVPIPPPPPPPPPPPPPPP			
PYPGADYPADYINGAFFP SDSRGPPPTDPYGRPPPY PVHSSIPPGPVPMGMPP PVHSSIPPGPVPMGMPP PSLSPDPDPVPKKPE		DESEPTORPERAPHVNPA							PPPPPPLPPDDDUTKDOM			
SDSRGPPPTDPYGRPPPY IPSAPULPPPPVBSIPP PVL952PPDPVBSIPP PVL952PPDPVBSIPP PSISHQPPPAPVEKKPE		PPPGAPPPAPHVNPAFFP							VEPTALDEADUR DODDA			
IPSAFVLPPPPVHSIPP PVHSSIPPGPVPKAPP PSLSHQPPPAPRVEKKPE		SDSRGPPPTDPYGRPPPY							NOL IAL PORTUPPPPV			
PVHSS1PPPGPVPMGMPP PSLSHQPPPAPRVEKKPE									1P5APVLPPPPVN351PP			
PSLSHQPPPAPRVEKKPE									PVHSSIPPPGPVPMGMPP			
									PSLSHQPPPAPRVEKKPE			

0 20 40 60 80 100

_ _ _ _ _

53	-	20 40 60 80 100		0 20 40 60 80 100				
					STXBP2	IMDRAADPVSPLLHELTF	1	
	YDDPHKTPASPVVHIRGL			PODNESTPVOPLAEROTE	SAMHD	RPRCDDSPRTPSNTPSAE		
	VLYTICNPCGPVORIVIF			TPSTNVKPKTPHQRKGGP		RLELLFPPSQPPQHLVTT		
	YHDEGYGPPPPHYEGRAM			PHSALHFPAAPRFIQKLR		EVKASEKPVSPKSGTLKS		
ы	YGPOYGHPPPPPPPPPP			NDHFQHFPPPPPILETSS		SVPSHTLPSHPVTPSSKH		
	OVGHPPPPPPPPPPPPPPP			EAGAROPPPAPRSAPPSP		SHTLPSHPVTPSSKHADS		
	NHYOMKNPNGPYPYTLKL			ARQPPPAPRSAPPSPPFP	ARHGEF	HADSKPAPLTPAYHTLPH		
	OT VET VYDDS DEDT BS CV			PPPAPRSAPPSPPFPPPP		HTTTNWGPLEPPKTPKPW		
m	WETRETI DOPOTRI LETT			APRSAPPSPPFPPPPAFP		TNWGDT.FDDRTDKDWST.S		
	FIAAWFORDCDOAVOTHE			SAPPSPPFPPPAFPELA		WODT PDDWPDWDWDT OCT.		
	TRECMET DAY DEDME DE C			PSPPFPPPPAFPELAACT		WOT DEFFRITERENDED		
	TRACALDERARY DELODS			ELAACTPPASPEPMSALA		WSLSCLRPAPPLRPSAAL		
12	TARRAGE CORCERNIT OF THE			SSSSLPSPMSPTPROFGR		VDPFVARPQDPHHPSERP		
	INTRODUCED FROM DE TRANSPORTE		PALLD	PROFERAPVPPFAOPFEA		FVAHPQDPHHPSEKPVIH		
	RAGGPEGPPRLPRIFNLR			AODFCAFDFADWCSSSDS		ACTICKRPFPPGDRVTFN		
	PEFERQYPEFPWTDVQAE			PARPERSNA COORDOND		SRPGSSIPGSPGHTIYAK		
	DLRAEFGPPGPGAGSRGL			PUREYERPWUSSSPSPPP	ABUM1	SGRNSPLPYRPDSRPLTP		
	REGSEEPPAEPVSFYTQP			L PLAF A JOB		NSPLPYRPDSRPLTPTYA		
EP	YDLLFMPPSFPFGGMENP	1		ARM000010110100000		LPYRPDSRPLTPTYAQAP		
	FDRWLNTPGWPPYLPDLS			GSSSPSPPPPPPPPPPPPP		YRPDSRPLTPTYAQAPKH		
	WLNTPGWPPYLPDLSPGD			SSPSPPPPPPPPVFSPTAA		KIETDHWPGPPSFAVVGP		
	DKILQKSPLPPGNVKKLG			FPVPDVFPLPPPPPPLPS		ERTESEVPPRPARPKVTD		
	EKGERTNPNHPTLWRPEY			PDVFPLPPPPPPPPPPPPPPP		FREVDDRDARDEUTBODD		
.C	SYMIEGTPGQPYGGTMSE			FPLPPPPPPLPSPGQASH		DDWEDDADADDDDDDDD		
	WQTMRFKPPPPNSDIGWR			AFLSALLPSQPPPAAVNA		RETUREALARY RELATION		
3P.)	GPPSAMTPPYPQFEQSET			VNQRGRSPRSPSGHPHVR		REPAPARPIMPPPQVSGS		
M5	GETAVNVPROPTVTSVCS			SWOLDGRPVRPDSAHKML		VSGSRSSPPAPPLPPGSG		
	LFGKKPKPQSPPLTPTSL			PFVHAVPPSDPLRCANRL		SRSSPPAPPLPPGSGSPG		
P1L	KEPEPOSPPLTPTSLFTS			PEYLOPLESTPUSPIELD		SPPAPPLPPGSGSPGTPQ		
	NEIKTGEPRIPSFRSLER			VERATCOPETDETCEDES		APPLPPGSGSPGTPQALP		
1L.	EEKSKPIPIMPASPOKGH			CEECCCDEAD#REEVIC		LPPGSGSPGTPQALPRRL		
	REGEDGVPRGPVLHIVVV			LOOST UN DIAD VERSONI	00000	VGSSLRAPTVPPPLPPTP		
	OVEFSYPPLIPGDGHDSH			DUGULYARVOFILFUUTY	onades	SLRAPTVPPPLPPTPPQP	1	
.9	TNOVIEDDERDEDDESFE			GLVAPVBPIRPGQTVFPL		APTVPPPLPPTPPOPARR		
	DATAFTNDNUDFOCOVPU			RPGQTVFPLPPAGMTYPG		VPPDT.PPTPPOPARROSR		
	CETROPI BTI BOOCINUS		2NF503	PHGVALDPTKPGSLVGAQ		PROCEPERACECERACEC		
411	UPOPT PODDT DORVITOR			SGYPLVYPTHPLHGVHSS		eppentepentepente		
	VENTER PROPORTADO			PPSLAGHPLYPYGFMLPN		SRRSFRSFSFRSFGFRSF		
610	IDEF VNFFDQFVVWREIS			LAGHPLYPYGFMLPNDPL		SPASPSPASPGPASPSPV		
010	GASTLOOLUVA SAAPTAT			HPLYPYGFMLPNDPLPHI		SPSPASPGFASPSPVSLS		
	NOOHLIKESSPENGLLOO			YPYGFMLPNDPLPHICNW		PEAISGVPTPPAIPPQPR		
	KGALARKPYNPIIGETFH			HIPTSGAPGSPGTLALRS		ISGVPTPPAIPPQPRPRS		
1,19	VIDTTLPVYPKKIRPLE			SKSPLPTPGAPVPVPAAT		VPTPPAIPPQPRPRSLAS		
	KRENLRTPWEPKYFIQEG			OKLOHINPLLPACINKEE		ELLIHVFPCVPERPGMPC		
	PPSLQPTPQVPQVQQSQP			AAFVTSPPLSPDPTTPDY		IHVFPCVPERPGMPCPGE		
	QPSQSSEPSQPQQKDPQQ		DPYSL3	VISPPLSPDPTTPDYINS		FPCVPERPGMPCPGEDKS		
	QSSEPSQPQQKDPQQPAQ			PDLSDDDTTDDYINSLLA	PRCKI	ECGRHSLPGEPVMPMDQS		
	EPSQPQQKDPQQPAQQQQ			TERREPORTORENTY		RHSLPQEPVMPMDQSSMH		
	QQQPAQQPKKPSPQPSSP		PYGB	AGOUE FORDERING FRUIT RED.		DHAOTVIPYNPSSHERLD		
	PAQQPKKPSPQPSSPRQV		PTVDD-	NOVEFOLOGIFPENIERD		FOROVVPPFKPNISGFFG		
	QPKKPSPQPSSPRQVKRA		SIADP1	1LDKGFDF33FVLHELTF		TTALCODDVDDODODOD		
	EENKAAEPPPPKIPKIET		MRE11A	NHVDIFNVDNVKVTQAIQ		T AND A AND A A A A A A A A A A A A A A A		
	KAREPPPPKIPKIETTHP			RLGNSHQPEKPLVRLRVD		LSVGSGWPSSPGSDPPLP		
	PRIETTHPPLPPAHPPPD		OS8PL11	KGAIAKKPYNPIIGETFH		000WPSSPGSDPPLPKPC		
	ETTHPPLPPAHPPPDRKP		ZFYVE1	ENNTTRSPRHPGVIFKAL		WPSSPGSDPPLPKPCGDH		
ŧK.	AALGEAEPPGPVDATDLP			RAKTQTPPVSPAPQPTEE		ASSQRVSPGLPSPNLENG		
	RERPTCTPALPPPCLPAO			TOTPPVSPAPOPTEERLP		NGAPAVGPVQPRTPSVSA		
	PTCTPALPPPCLPAOPAP		CTTN	PPVSPAPQPTEERLPSSP	LIMD1	PAVGPVQPRTPSVSAPLA		
	TPALPPPCLPAOPAPATC			SPAPQPTEERLPSSPVYE		GSVLLDSPSSPRVRLPCQ		
	PTPYSWLPPTPTHLOPOP			POPTEERLPSSPVYEDAA		LLDSPSSPRVRLPCOPLV		
	VSWLDDTDTHLODORDTD			VOVSFCAPGAPGRSTLAA		SPSSPRVRLPCOPLVPGP		
	LPPTPTHLODAPDTD		RAVER2	TAGMENLPFFPNOHTAGO		SPRVRLPCOPLVPGPFT.P		
	PDFUT ODOPD#D#D#D#D			PTT DEGENTEDTODAWY		VBLDCODLUDGDFLBBBB		
	AT ADORDEDEDEDEDEDEDEDEDEDEDEDEDEDEDEDEDEDED			E AMERICA FAREAUEARAY		FCAACCI DTL DDFCODE		
	REAL PROPERTY AND A P		014.5	PROLEIREIJEAARVSHT		BORODELLEPPEOSUET		
	PUPPTPTPTPTAIPRSPP		UN13	WOPDEPLICARTWPDCPRN		FOR WEILFALFRAIDLLR		
	PTFTPTPPPAYPRSPPSSS			PRPRPWGPQEPLRAATWP		DELEDLPSPPPPLSPPPT		
	TPTPPAYPRSPPSSSSRV			MAFPRPRPWGPQEPLRAA		LEDLPSPPPPLSPPPTTS		
388	EWFSTLFPRIPVPVQKNI		THE 3	VEAAVLLPEEPVSQLGVK	GPHN	DLPSPPPPLSPPPTTSPH		
	RTRSWTQPPTPTRLHNGG		1013	CVYTQAQPPGPGQELTHC		VYARDNLPPFPASVKDGY		
C22	GYONFLYPSEPDLRDLLL		10.01	IRESTLGPDHPAVAATLN		FGRVFMKPGLPTTFATLD	-	
			KLC4	THE OAL CONTRACTOR DURING				

PPPPFGFGVPAAPVLPFG

FGFGVPAAPVLPFGLTPK

0 20 40 60 80 100

Figure S2. ARHGAP4/SH3 - in Vitro Binding Assay (2/2)

G2

	0 20 40 60 80 100		0	20 40 60 8	0 100	0	2	0 4	0 60	80	100
DAZAP1	GRNIDFKPCTPRGMQPER RDSKSQAPGQPGASQMGS PPAGRGAPPPPPFTSYI AGRGAPPPPPFTSYI AGRGAPPPPPFTSYI GPSFGYGPPPPPTQFAPGY FGYGPPPPPDQFAPPGYPP PPPPDQFAPGYPPPAT PDQFAPFGYPPPATGAA PPGYPPPPATGAAPLA PPGYPPPPATGAAPLAF CASUS PDFGAPGYPPATGA		HQLFADAPPPSAPNEVV FADAPPPSAPNPVVSSI LGSGLPPPCMPPGSSPP PPGSPPPVPPDFDALPGI PSFVPPVPPGALPGIPPAM VPPGALPPGIPPAMPPPMP CALPPGIPPAMPPPMP CALPFGIPPAMPPPMPGA GIPPAMPPPMPGAGMPHPG			MATEHPEPEKAELQLPPP EHPEPEKAELQLPPPPPP EPEKAELQLPPPPPPCHY KAELQLPPPPPPPCHY SAQLPGIPMPPPPLGLPP LPGIPMPPPLGLPPLQP IPMPPPLGLPPLQPPPPPPP PPPLGLPPLQPPPPPPPPP LGDLPPLQPPPPPPPPCG					
ACTR2	SKPPTAQDFPYGQYAGY QPFSYGGPSYDGSGFPA KILLTEPPMNPTKNREKI	SF384	PGSGGQPPPRPPPGMPHP GGQPPPRPPGMPHPGPP PPPRPPGMPHPGPPPMG RPPPGMPHPGPPPMGMPP		SF38	2 LOPPPPPPPPPPGLGLGF AHPPNLGPPPPLRVGEPV AKMGTPVPRPPQDMGQIG COLGVPTPLGPBVA DVG					
AUTRE	SGGSTHYPGLPSELEREL MEQKTVIPGMPTIPPGL RTGDLGIPPNFEDRSPSP SDCKFQRFGDPQSAQDKA PLASAPRAAPANNPPPP MADANNPPPPSLMSTTQ HGHIGGGPGGGGGGSGPSF GCHMQCHNPGPPPMQPPPP PPPPMQCPPPPNQPPP PPPPMQCPPPPPNQPPP PPPMNQCPPPPSQPPP PPPMQCPPPPSQPPP PPPMQCPPPPSQPPP PPPMQCPPPPSQPPP		PEMPHPGPPMGMPPAGPP PHotoPpmGMPPAGPPG SPPGMAPROPPGPMG SPMGHPGPMPHGMRGPP HGMRGPPLMPPHGYRGP GYTGPPRPPYGYRGPL PYGYGRPLPPRPYGYRGPL YGRGPLPPRPTPRPY GPLPPRPTPRPYPPRGPLR PPPRPTPRPYPPRGPLRGPL TPRPPYPPRGPLRGPLPQ LIAGE/UDE DE DE DE			GQIGVRTPLGPRVAAPVG GVRTPLGPRVAAPVGPVG PLGRVVAAPVGPVGPTPT MGAPVTPRGPPPPGDEN PVPRPRGPPPPGDENNER PRPRGPPPPGDENNER MDDPSVGPKIPQALEKIL DDEGEKKPEAPKLSKKL LRISLGMPVGPNALKIPGL					
SF1	PPPPSQpPPPpscLpP PPpPpsqpPpPpsqQQQQQ QQQQQQPPPPPPPsssM QQQAAAASPGARQMQCNPT QSNPTHVPLPPgVQPPLP	USP5 HADHB ROPN1L	EKIPQNAPTDPTQDFSTQ IAPPLVTPDEPKGSLGFY CSPHFSSPTSPMLDESVI DSISESVPVGPKVRDGPG FRFNFLAPELPAVSEFST AOOIHIPPELPDLKOFT								
	PLPPGVQPPLPGAPPPPPP GVQPELPGAPPPPPPP PLPPGAPPPPPPPGSA GAPPPPPPPPPGSA SAGMYAPPPPPPPPPPPPP	HEATR3	ARLVOORPALPGLARRDA DPEIVKSPSDPKQYRYIK LFGSLARPGHPMGKFFWG VMQLTYLPTSPLLADCII								
	MYAPPPPPPPMDPSNFV PPPPPPPPMDPSNFVTMM GMPPFGMPPAPPPPPON	PLS3	PDCRHVIPMNPNTDDLFK DWSKVNKPPYPKLGANMK MNGKRPAEPGPARVGRKG								
MY06 CTPS	ARQMELHPDKPPILLVAG HPEFLSRPIKPSPPYFGL FLSRPIKPSPPYFGLLLA	OGF0D1	RPPNYFEPPIPRSPHIPQ NYFEPPIPRSPHIPQDHE EPPIPRSPHIPQDHEILY								
DUSP3 FUBP3	GSGCYSLPSQPCNEVTPR ASESSGIPERPCVLTGTP GOSPFSOPPAPPHONTFP		EEGTSHSPPEPENNQMAI								

Figure S2. RICS/SH3 - in Vitro Binding Assay

Н

PSFGAQVAPKTLPWGPKR VN1R2 VSAHGEKPTKPVGLDPTL

Figure S2. ARHGAP12/SH3 - in Vitro Binding Assay

Figure S2. Co-immunoprecipitation assay

Fig. S3. Rho family GAP PI cluster interactomes and colocalization data. **A-I**) Protein-protein interaction networks of Rho GAPs were constructed from SH3 domain PI clusters based on peptide array and published interactome data. Circle nodes represent proteins in the PI clusters specific to individual RhoGAP SH3 domains. Hexagon nodes represent sub-specific proteins that were association with two RhoGAP SH3 domains. These two types of nodes are colored to reflect the mean normalized spectral counts (see spectral scale). Diamond nodes in cyan represent Rho GTPases added to visualize their potential links to the networks. Brown edges represent novel SH3-ligand interactions, and orange edges represent known interactions reproduced by this study. Thickness of these edges reflects the relative binding affinity determined by the in vitro binding assays. Blue and cyan edges that have a constant thickness indicate previously known interactions. Cyan edges exhibit known interactions with Rho GTPases. J) Co-localization of Endogenous ARHGAP12 and Tight Junction Protein TJP2 at cell-cell junctions. Human bronchial epithelial cells were fixed and stained with antibodies against indicated proteins. Scale bars = 10µm.

Η

Spectral Counts

Fig. S4. Gephyrin's Interaction with WRP and colocalization with VIAAT. **A**) HEK293 cells coexpressing GFP-gephyrin with vector, V5-tagged full-length WRP or WRP lacking its SH3 domain, were subjected to immunoprecipitation by V5 antibody. Co-precipitation was analyzed by Western blot analysis using indicated antibodies. Representative blot from n=3 is shown. **B**) Co-localization of endogenous gephyrin and inhibitory synapse presynaptic marker VIAAT in hippocampal neurons. Dissociated hippocampal neurons were fixed at DIV12 and stained with gephyrin antibody mAb7a and VIAAT antibody. Scale bars = 10µm.

Fig. S5. Endogenous gephyrin is highly colocalized with inhibitory synapse presynaptic marker
VIAAT in vivo. A) Stratum radiatum of CA1 region in the hippocampal formation from P40
WRP^{+/+} and WRP^{-/-} mice was stained with mAb7a and VIAAT antibodies. Scale bars = 10µm.
B) Quantification of the gephyrin and VIAAT puncta density. n=3 mice. From each mouse, 4
brain slices were processed for immunostaining and 2 images/slice were obtained. The data are represented as mean ± SEM.

