

Table S1

RABs	Localization	Function	H4 cells + aSyn monomers		H4 cells + aSyn fibrils	
			Colocalization	Morphology	Colocalization	Morphology
Rab1A, 1B	ER, Golgi	ER to Golgi, Intra-Golgi	No	11% more RAB-vesicles	No	9% more RAB-vesicles
Rab3A	Secretory vesicles, plasma membrane	Exocytosis, neurotransmitter release	+	7% more RAB-vesicles	+	15% more RAB-vesicles
Rab4A	Early endosome	Protein recycling/transport to plasma membrane	+++	51% more RAB-vesicles	No	42% more RAB-vesicles
Rab5A	PM, CCVs, early endosome	Early endosome fusion	+++	32% more RAB-vesicles	No	35% more RAB-vesicles
Rab6A	Golgi	Endosome to Golgi, intra-Golgi transport Golgi to ER	No	46% more RAB-vesicles	No	41% more RAB-vesicles
Rab7	Late endosome, lysosome, melanosomes, phagosome	Late endosome to lysosome	+++	54% more RAB-vesicles	No	50% more RAB-vesicles
Rab9A	Late endosome	Endosome to TGN	+++	No changes in the distribution pattern	No	No changes in the distribution pattern
Rab15	Early/sorting endosome, recycling endosome	Sorting endosome/ recycling endosome to plasma membrane	No	40% smaller RAB-vesicles	+	23% smaller RAB-vesicles
Rab25	Recycling endosome	Recycling endosome to plasma membrane	No	40% more RAB-vesicles, 15% more cytosolic RAB	No	18% more RAB-vesicles, 48% more cytosolic RAB
Rab27B	Melanosome	Exocytosis	+	41% more RAB-vesicles	No	25% more RAB-vesicles
Rab33A, 33B	Golgi, dense-core vesicles	Autophagosome formation	No	18% more RAB-vesicles	No	35% more RAB-vesicles