

Small Wing PLCy Is Required for ER Retention of Cleaved Spi during Eye Development in Drosophila

Ayelet Schlesinger, Amy Kiger, Norbert Perrimon, Ben-Zion Shilo.

Supplemental Material

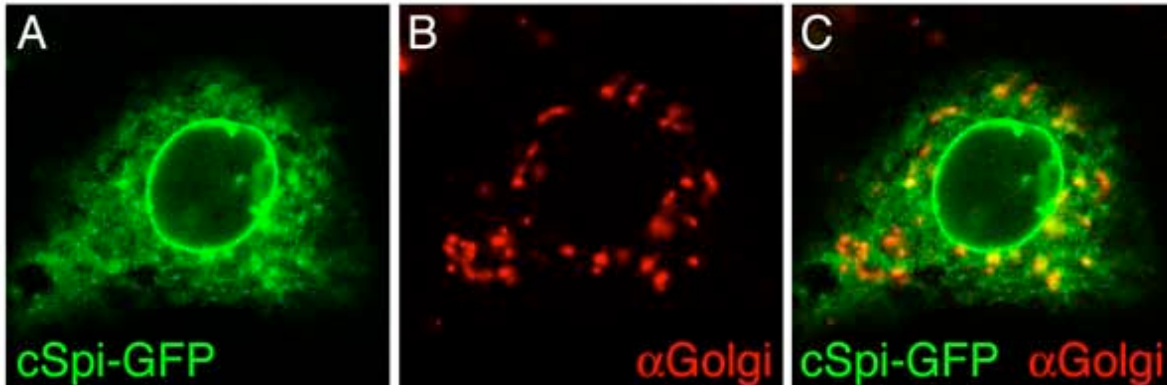


Figure S1. cSpi Does Not Colocalize with a Golgi Marker

S_2R^+ cells expressing cSpi-GFP were stained with a marker for the Golgi (red). Only very minor colocalization was observed, which may correspond to the fraction of cSpi molecules en route to secretion.

Table S1. Genes Corresponding to dsRNAs that Compromised the ER Retention of cSpi

	Name	Bip Localization	Structure, Putative Role
CG4926	ROR	punctate	Trk-related tyrosine kinase
CG5373	PI3K 59F	punctate	PI3 kinase
CG7736	Syntaxin 6	punctate	T-Snare
CG10642	KLP 64D	punctate	kinesin motor, on MT
CG4200	Small wing	ER	phospholipase C-g
CG7236	KKIALRE	ER	cyclin-dependent kinase
CG8639	CIRL	ER	synaptic vesicle fusion
CG8865	RGL	ER	RAL-GTP exchange factor
CG9968	Annexin B11	ER	binds phospholipids, binds actin
CG10776	ALK3 / BMPR 2	ER	BMP receptor
CG17090	HIPK	ER	defects in ISN neuron pathfinding

Following a screen of 1035 dsRNAs, 11 were shown to compromise ER accumulation of cSpi-GFP in S_2R^+ cells. None of these genes affected the ER accumulation of the full-length, transmembrane form of the Spi precursor. Four of the genes were shown to affect the intracellular localization of the ER-resident protein BiP and may thus exert an effect that is not specific to the retention of cSpi.