

Subcellular localization	SnRK1 interactor	SnRK1 subunit	References
Nucleus	FUS3	SnRK1 $\alpha$ 1	(Tsai and Gazzarrini, 2012)
Nucleus	RAO1	SnRK1 $\alpha$ 1	(Ng et al., 2013)
Nucleus	KRP6	SnRK1 $\alpha$ 1	(Guerinier et al., 2013)
Nucleus	FLZs	SnRK1 $\alpha$ 1	(Nietzsche et al., 2014)
Nucleus	bZIP63	SnRK1 $\alpha$ 1	(Mair et al., 2015)
Nucleus	PTL	SnRK1 $\alpha$ 1	(O'Brien et al., 2015)
Nucleus	IDD8	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Jeong et al., 2015)
Nucleus	WRI1	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Zhai et al., 2017)
Nucleus	ABF2, HP2	SnRK1 $\alpha$	(Song et al., 2019)
Nucleus	SOG1	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Hamasaki et al., 2019)
Nucleus	ERF7	SnRK1 $\alpha$	(Feng et al., 2020)
Nucleus	AFP2	SnRK1 $\alpha$ 1	(Carianopol and Gazzarrini, 2020)
Nucleus	SPCH	SnRK1 $\alpha$ 1	(Han et al., 2020)
Nucleus	SnRK2.2, PP2CA	SnRK1 $\alpha$	(Belda-Palazon et al., 2020)
Nucleus	JMJ705	SnRK1 $\alpha$ 1	(Wang et al., 2021)
Nucleus	MAPK11	SnRK1 $\alpha$	(Song et al., 2021)
Nuclear body	FLZs	SnRK1 $\alpha$ 1	(Nietzsche et al., 2014)
Nuclear body	STKR1	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Nietzsche et al., 2018)
Cytoplasm	MPK6, PTP1	SnRK1 $\alpha$ 1	(Cho et al., 2016)
Cytoplasm	RAPTOR1B	SnRK1 $\alpha$ 1	(Nukarinen et al., 2016)
Cytoplasm	ATG6, VPS34	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Huang et al., 2019)
Cytoplasm	eIFiso4G-1, -2	SnRK1 $\alpha$ 1	(Cho et al., 2019)
Cytoplasm	TPS, HP1	SnRK1 $\alpha$	(Song et al., 2019)
Cytoplasm	PBZF1	SnRK1 $\alpha$	(Xiao et al., 2020)
Cytoplasm	OXS3	SnRK1 $\alpha$ 1	(Chen et al., 2021)
ER	FLZ6, FLZ10	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Jamsheer et al., 2018a)
ER	FLZs	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Jamsheer et al., 2018b)
ER	FLZ8	SnRK1 $\alpha$ 1	(Jamsheer et al., 2022)
PM	NT2.4, PIP, HK2	SnRK1 $\alpha$	(Song et al., 2019)
PM	SLAH3	SnRK1 $\alpha$ 1	(Sun et al., 2021)
SGs	TSN1, TSN2	SnRK1 $\alpha$ 1, SnRK1 $\alpha$ 2	(Gutierrez-Beltran et al., 2021)

**Supplementary table S1.** SnRK1 interacting proteins shown in Fig. 1.

SnRK1 subunit	SnRK1 localization	References
SnRK1 $\alpha$ 1	Cytoplasm	(Ramon <i>et al.</i> , 2019)
SnRK1 $\alpha$ 1	SGs	(Gutierrez-Beltran <i>et al.</i> , 2021)
SnRK1 $\alpha$ 1	ER	(Blanco <i>et al.</i> , 2019)
SnRK1 $\alpha$ 1	Chloroplast	(Fragoso <i>et al.</i> , 2009)
SnRK1 $\alpha$ 1	Nucleus	(Ramon <i>et al.</i> , 2019)
SnRK1 $\alpha$ 1	PM	(Sun <i>et al.</i> , 2021)
SnRK1 $\alpha$ 2	Cytoplasm	(Williams <i>et al.</i> , 2014)
SnRK1 $\alpha$ 2	SGs	(Gutierrez-Beltran <i>et al.</i> , 2021)
SnRK1 $\alpha$ 2	ER	(Jamsheer <i>et al.</i> , 2018a)
SnRK1 $\alpha$ 2	Chloroplast	(Fragoso <i>et al.</i> , 2009)
SnRK1 $\alpha$ 2	Nucleus	(Williams <i>et al.</i> , 2014)
SnRK1 $\beta$ 1	Cytoplasm	(Ramon <i>et al.</i> , 2019)
SnRK1 $\beta$ 1	GA	(Wang <i>et al.</i> , 2020)
SnRK1 $\beta$ 1	Chloroplast	(Ruiz-Gayosso <i>et al.</i> , 2018)
SnRK1 $\beta$ 1	Nucleus	(Wang <i>et al.</i> , 2020)
SnRK1 $\beta$ 1	PM	(Pierre <i>et al.</i> , 2007)
SnRK1 $\beta$ 2	Cytoplasm	(Ramon <i>et al.</i> , 2019)
SnRK1 $\beta$ 2	Chloroplast	(Ruiz-Gayosso <i>et al.</i> , 2018)
SnRK1 $\beta$ 2	Nucleus	(Gissot <i>et al.</i> , 2006)
SnRK1 $\beta$ 2	PM	(Pierre <i>et al.</i> , 2007)
SnRK1 $\beta$ 3	Cytoplasm	(Ruiz-Gayosso <i>et al.</i> , 2018)
SnRK1 $\beta$ 3	Chloroplast	(Ruiz-Gayosso <i>et al.</i> , 2018)
SnRK1 $\beta$ 3	Nucleus	(Gissot <i>et al.</i> , 2006)
SnRK1 $\beta$ $\gamma$	Cytoplasm	(Ruiz-Gayosso <i>et al.</i> , 2018)
SnRK1 $\beta$ $\gamma$	Chloroplast	(Ruiz-Gayosso <i>et al.</i> , 2018)
SnRK1 $\beta$ $\gamma$	Nucleus	(Bitrian <i>et al.</i> , 2011)

**Supplementary table S2.** Subcellular localization of SnRK1 subunits shown in Fig. 5A.

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