

Supplementary Table S1. *List of the antibodies used and their application.*

Importin β 1	WB	Rabbit monoclonal	#8673	Cell Signaling Technology, Danvers, MA, USA
Fibrillarin	WB	Mouse monoclonal	sc-374022	Santa Cruz Biotechnology, Santa Cruz, CA, USA
ERK5	WB	Rabbit polyclonal	#3372	Cell Signaling Technology, Danvers, MA, USA
ERK5	IF	Mouse monoclonal	sc-398015	Santa Cruz Biotechnology, Santa Cruz, CA, USA
pERK5-T218/Y220	WB	Rabbit polyclonal	#3371	Cell Signaling Technology, Danvers, MA, USA
KLF-2	WB	Rabbit monoclonal	#15306	Cell Signaling Technology, Danvers, MA, USA
MEK5	WB	Mouse monoclonal	sc-365198	Santa Cruz Biotechnology, Santa Cruz, CA, USA
Importin β 1	IF	Rabbit polyclonal	PA5-83110	ThermoFisher Scientific, Waltham, MA, USA
Cyclin B1	WB	Rabbit monoclonal	sc-245	Santa Cruz Biotechnology, Santa Cruz, CA, USA
H4	WB	Rabbit monoclonal	#13919	Cell Signaling Technology, Danvers, MA, USA
α Tubulin	WB	Mouse monoclonal	sc-32293	Santa Cruz Biotechnology, Santa Cruz, CA, USA
GAPDH	WB	Mouse monoclonal	sc-47724	Santa Cruz Biotechnology, Santa Cruz, CA, USA
IRDye 800CW	WB	Goat anti-rabbit	926-32211	LI-COR Biosciences, Lincoln, NE, USA
IRDye 800CW	WB	Goat anti-mouse	926-32210	LI-COR Biosciences, Lincoln, NE, USA
IRDye 680RD	WB	Goat anti-rabbit	926-68071	LI-COR Biosciences, Lincoln, NE, USA
IRDye 680RD	WB	Goat anti-mouse	926-68070	LI-COR Biosciences, Lincoln, NE, USA