

**Supplementary Table S2.** Main upstream proteins/pathways regulating GSK3 $\beta$  activity mentioned in the present paper, cellular processes they stimulate, and their influence on the activity of GSK3 $\beta$ , together with the experimental model and methods of detection used in the reviewed papers.

GSK3 $\beta$ regulators	Function of active protein/pathway	Effects of active protein/pathway on GSK3 $\beta$ activity	Experimental model	Detection method	Source
PI3K/Akt	cell differentiation	negative regulation	rat primary cultures of hippocampal neurons	Western blot, immunocytochemistry	[58]
				Western blot	[59]
RhoA	cell migration	negative regulation	human HEPG2 cancer cell line	Western blot	[131]
Cdc42/Par6/ PKC $\zeta$	asymmetric cell division promoted by interactions of APC with the plus ends of microtubules	negative regulation	rat primary cultures of astrocytes	Western blot, immunocytochemistry, cell migration assay	[51]
RhoGTPase/Cdc42/PKC	prevention of actin branching and lamellipodia formation	negative regulation	rat primary cultures of astrocytes	Western blot, immunocytochemistry, cell migration assay	[51]
ROCK1	amoeboid movement stimulation	negative regulation	RAW 264.7 mouse macrophages, human embryonic kidney cell line HEK293	Western blot	[108]
ErbB2	microtubules assembly, cell motility	negative regulation	Human Breast Cancer Cell Line SK-BR-3	Western blot, immunocytochemistry, time-lapse fluorescence microscopy	[142]