

Prion protein (PrP^C)	
Function	Effects and properties
Stress and neuroprotection	Anti-oxidative stress response [43,44] Protection from ER-stress induced apoptosis [45]
Regulation of autophagy	Supports autophagy by facilitating autophagosome-lysosomal fusion [46]
Regulation in cancer progression	Induction of cell survival in tumor cells [47]
B-amyloid precursor protein (APP)	
Stimulation of cellular growth	Proper neurite outgrowth [48]
Neural stem cells viability	Increases and sustains the proliferation of neural progenitor cells [49,50]
Regulation of synaptic plasticity, learning and memory	Supports dendritic spine formation during development [51] Enhances N-methyl-D-aspartate receptor (NMDAR) function [52]
Regulation of blood coagulation and wound repair	Accumulation in platelet α granules and release during wound healing [53] Anti-coagulant properties to regulate thrombosis after cerebral vascular injury [54]