AR-A014418 is an inhibitor of GSK-3β that exhibits anticancer, analgesic, cognition enhancing, neuroprotective, and anti-inflammatory activities. AR-A014418 decreases cell viability and downregulates expression of splicing factors, Bcl-2, Bcl-xl, survivin, and MCL-1 in glioma cells. In models of neuropathic pain, AR-A014418 inhibits thermal hyperalgesia and mechanical allodynia, potentially through suppressing expression of glutamate transporter GLT-1. This compound also inhibits the development of learning and memory deficits in animal models of diabetes. In spinal cord injury models, AR-A014418 prevents mitochondrial apoptosis and decreases levels of pro-inflammatory cytokines.

References

