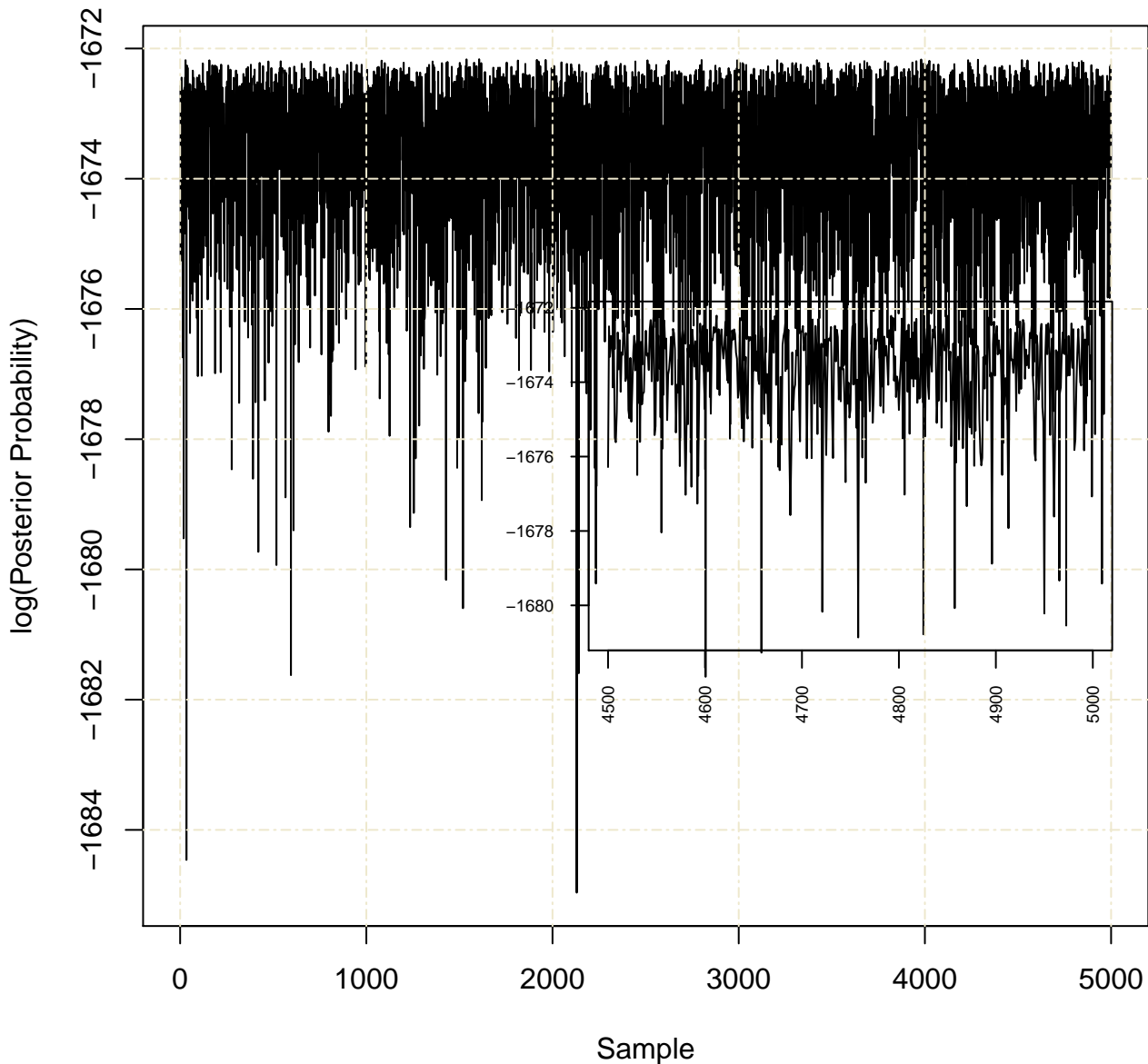**log(Posterior Probability): −1673.66721160873**

Trace of the Expected value of φ