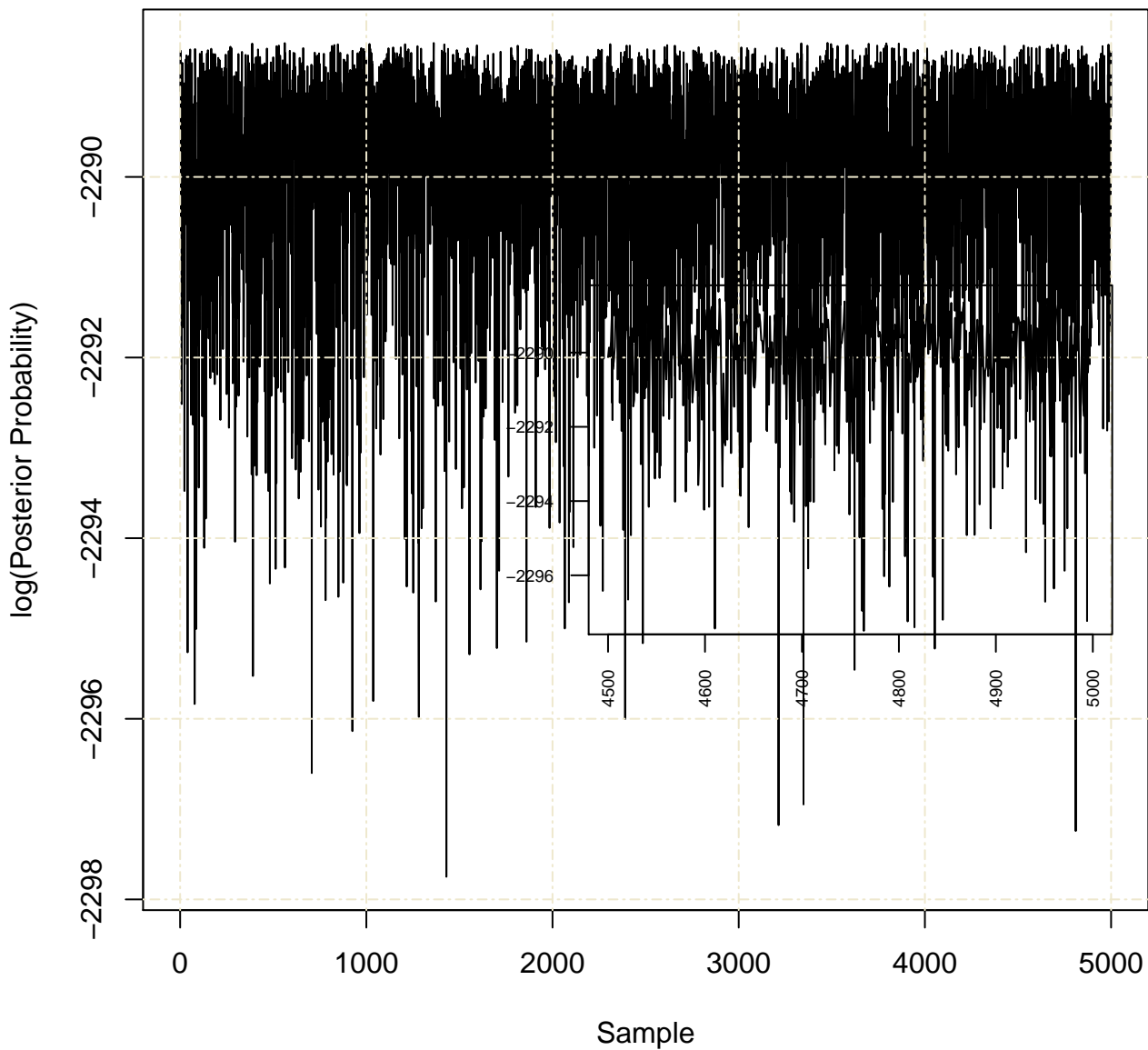**log(Posterior Probability): −2289.98369015697**

Trace of the Expected value of φ