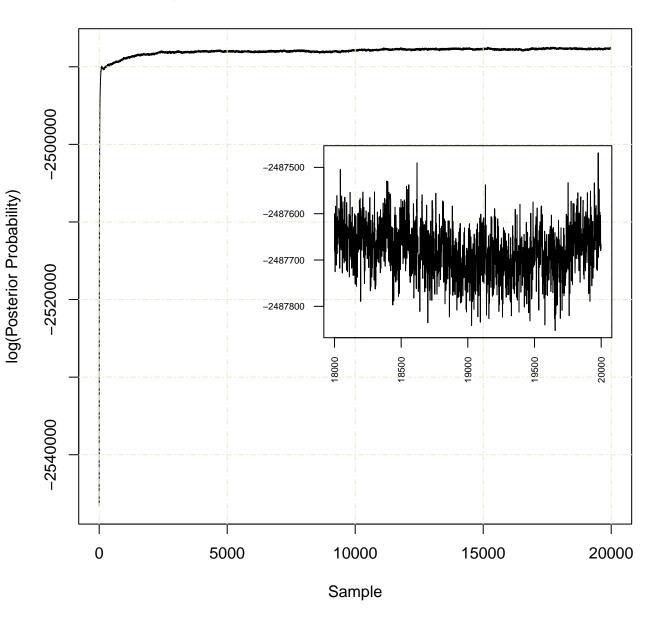
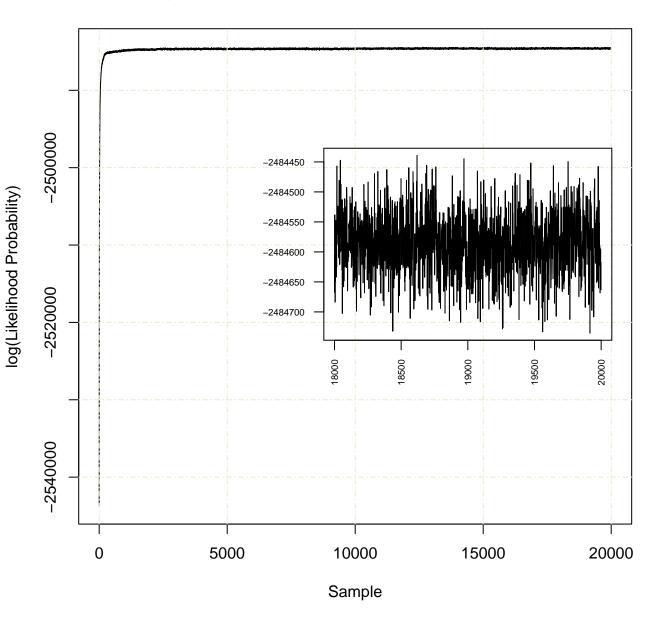
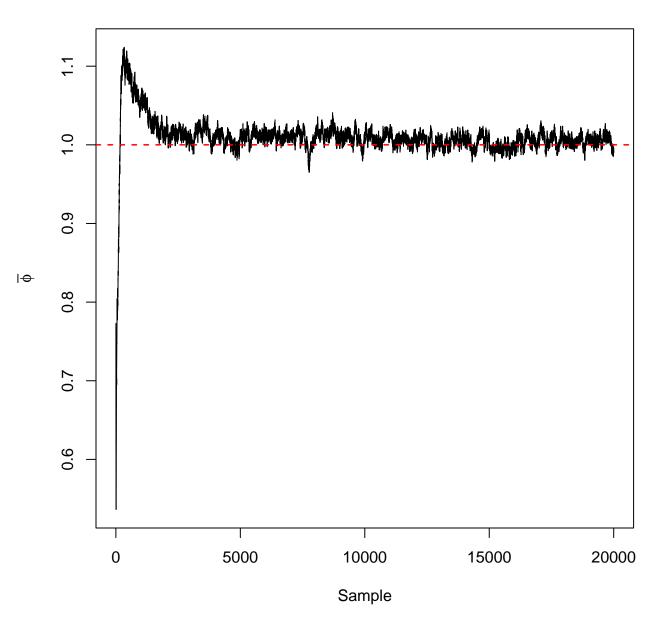
### log(Posterior Probability): -2487679.38698803



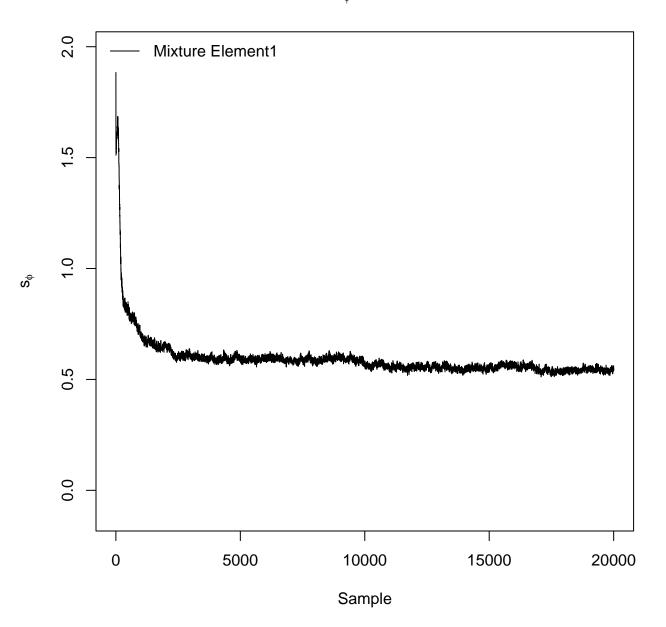
### log(Likelihood Probability): -2484586.53470845



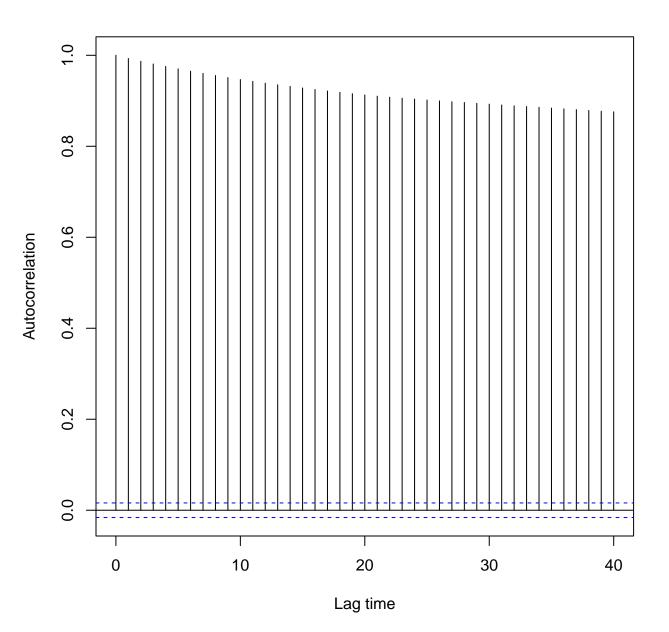
# Trace of the Expected value of $\phi$



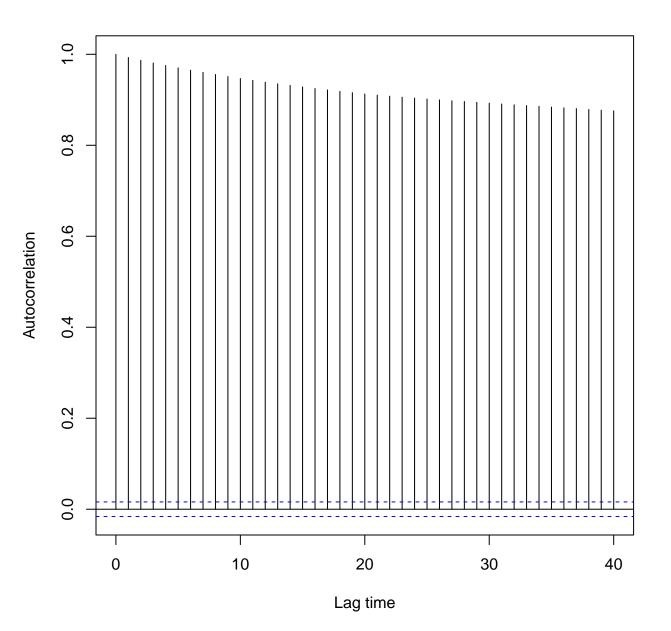
 $s_{\phi} \text{Trace}$ 



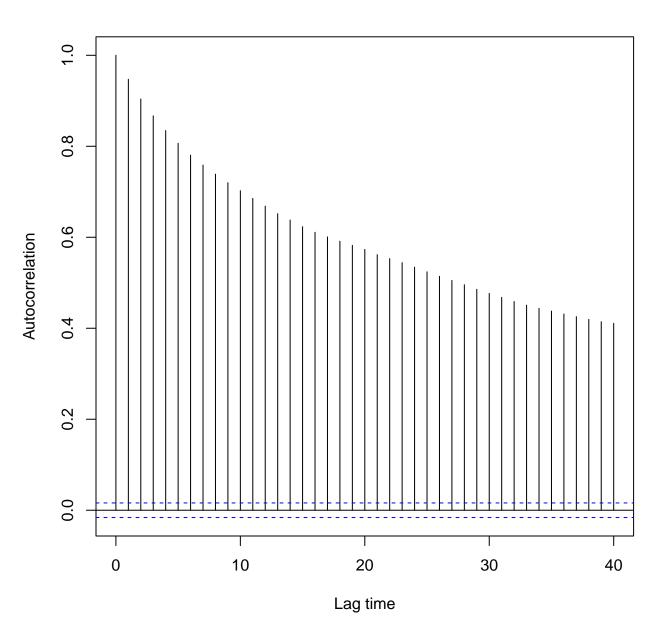
## **Selection A GCA Mixture: 1**



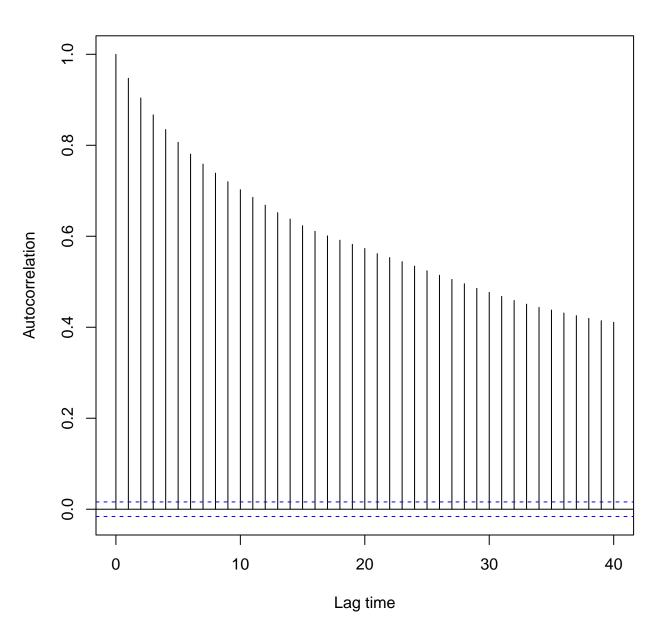
## **Selection A GCA Mixture: 2**



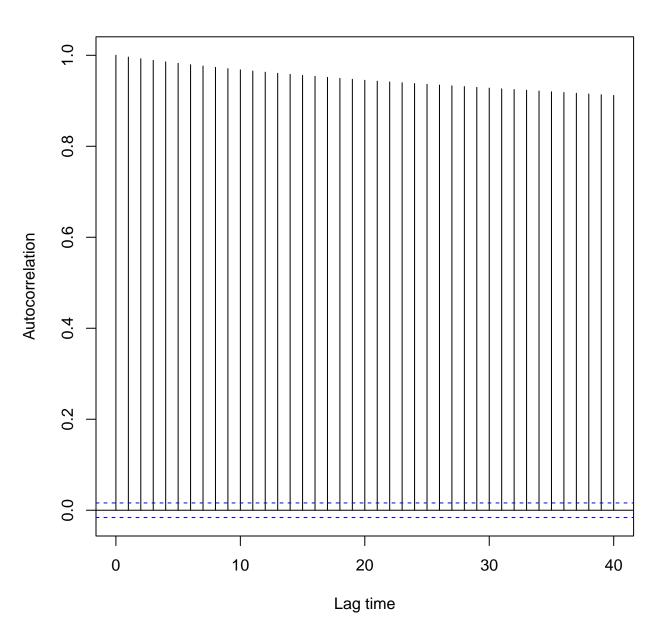
## **Selection A GCC Mixture: 1**



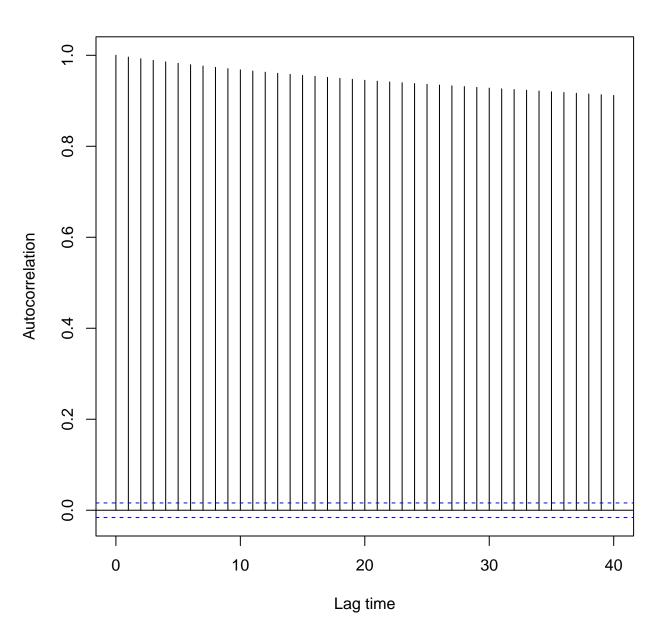
# **Selection A GCC Mixture: 2**



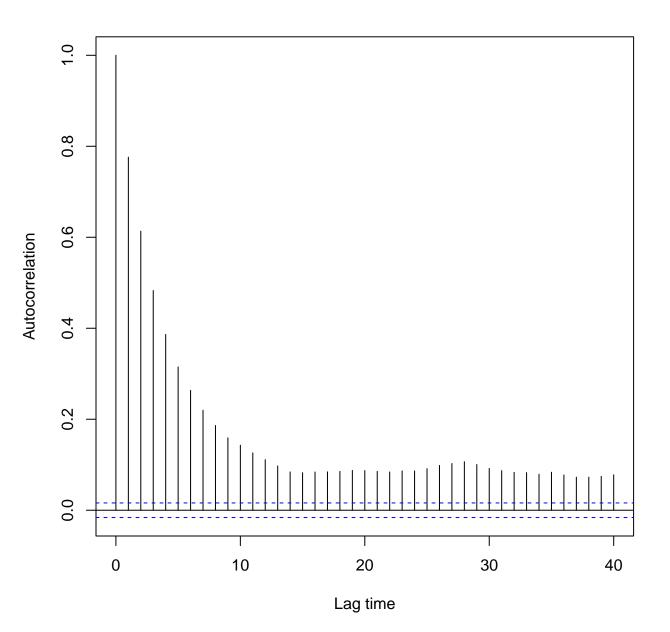
## **Selection A GCG Mixture: 1**



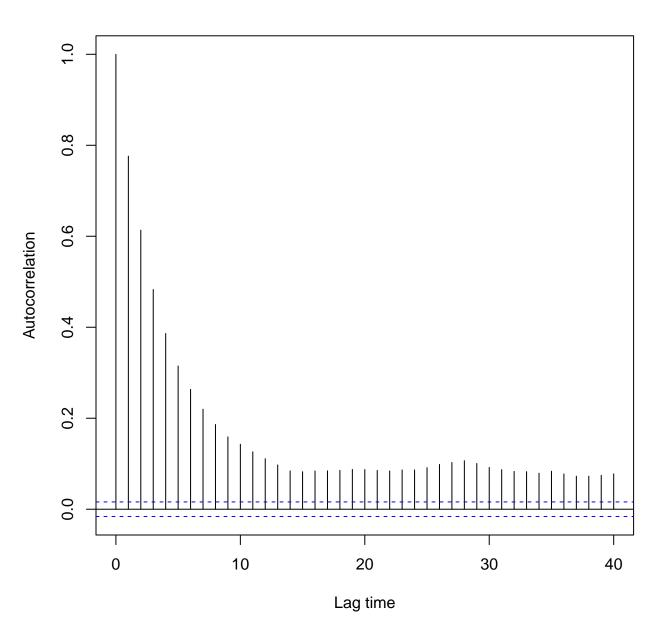
## **Selection A GCG Mixture: 2**



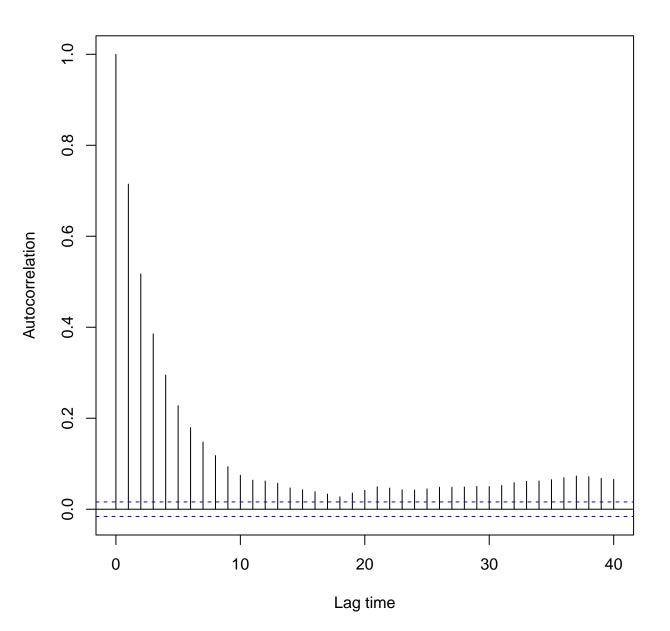
# **Selection C TGC Mixture: 1**



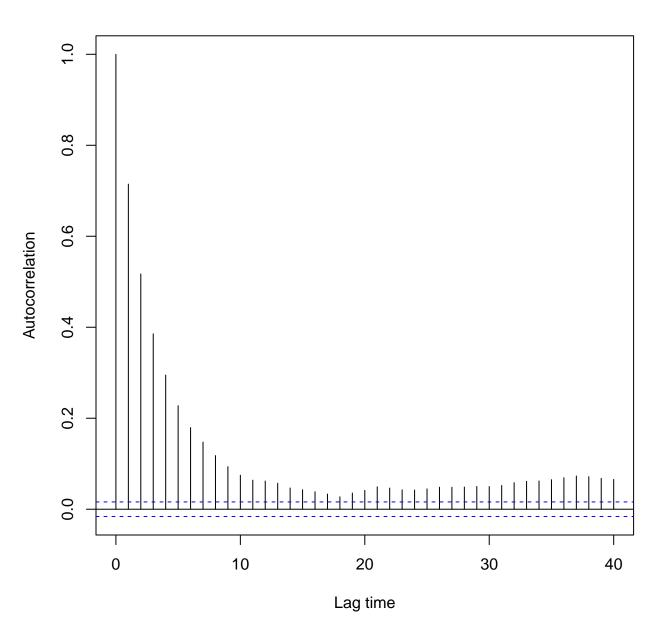
## **Selection C TGC Mixture: 2**



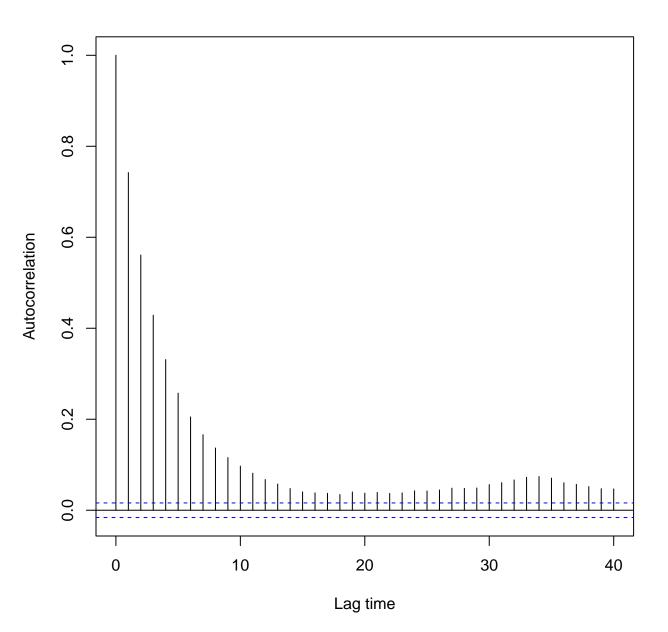
## **Selection D GAC Mixture: 1**



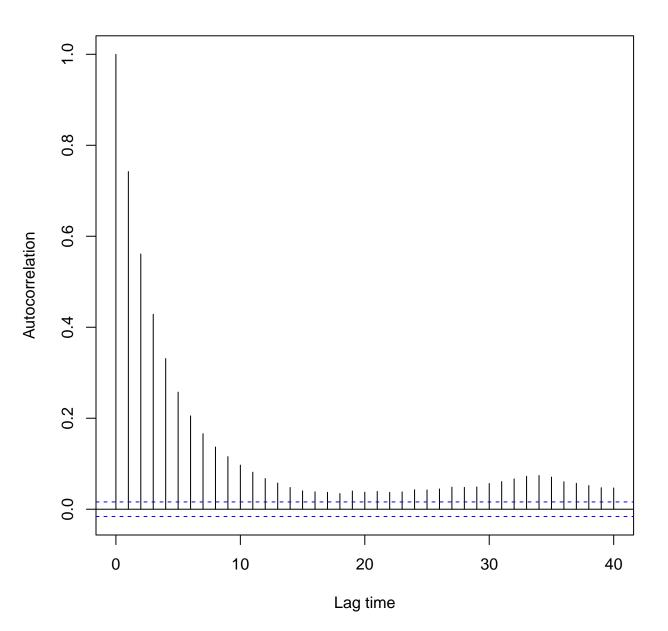
## **Selection D GAC Mixture: 2**



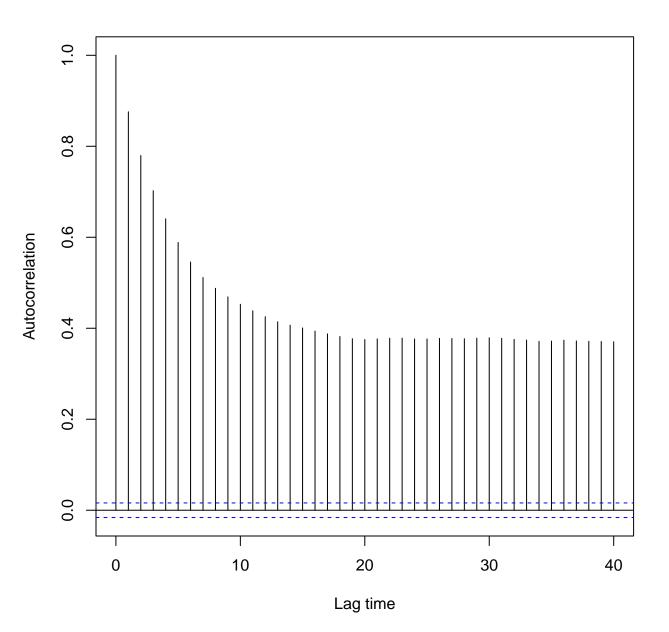
#### **Selection E GAA Mixture: 1**



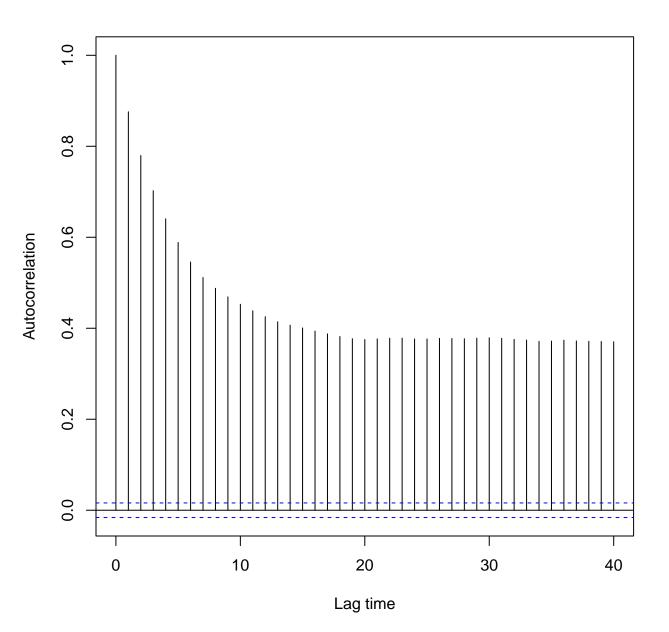
#### **Selection E GAA Mixture: 2**



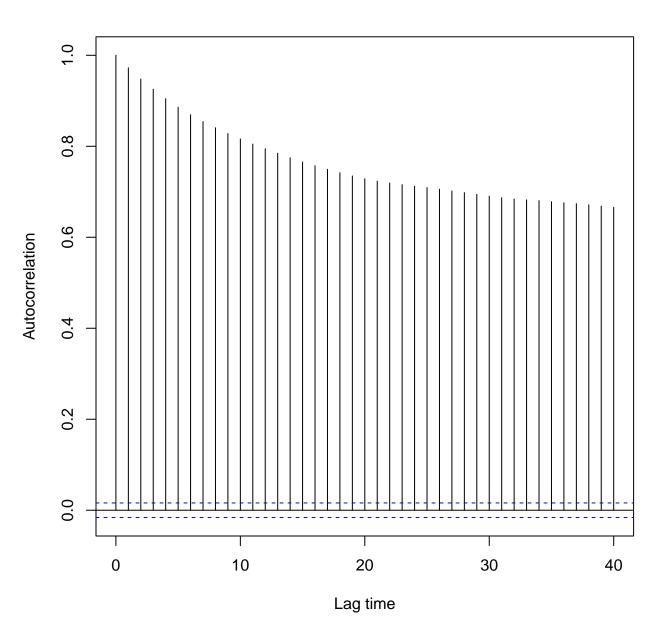
# **Selection F TTC Mixture: 1**



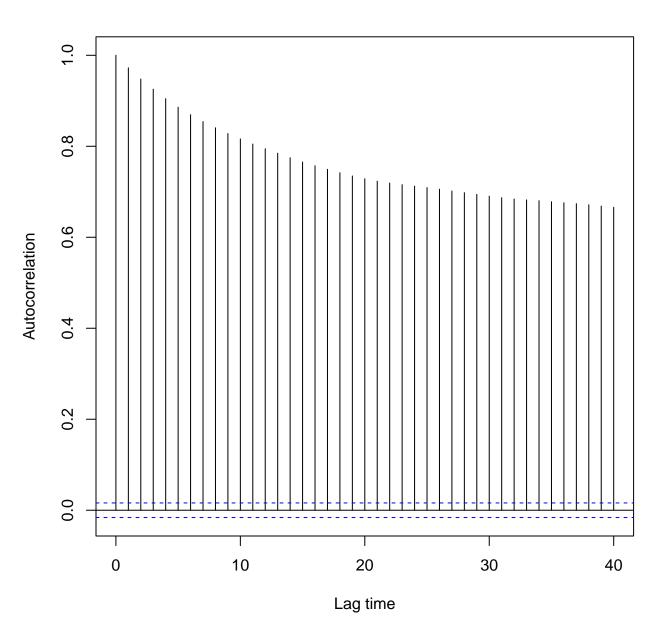
# **Selection F TTC Mixture: 2**



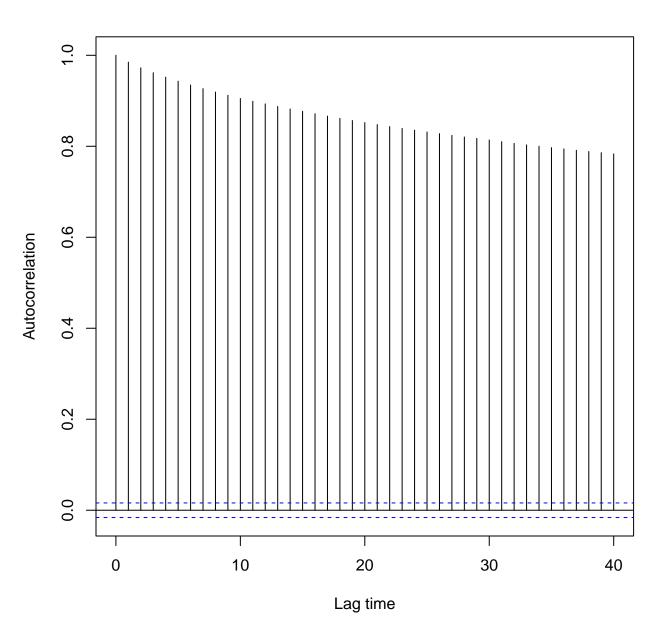
#### **Selection G GGA Mixture: 1**



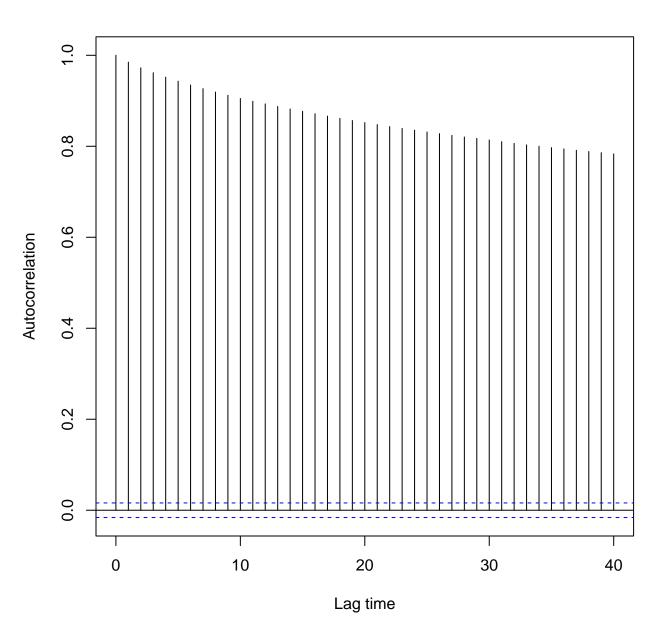
#### **Selection G GGA Mixture: 2**



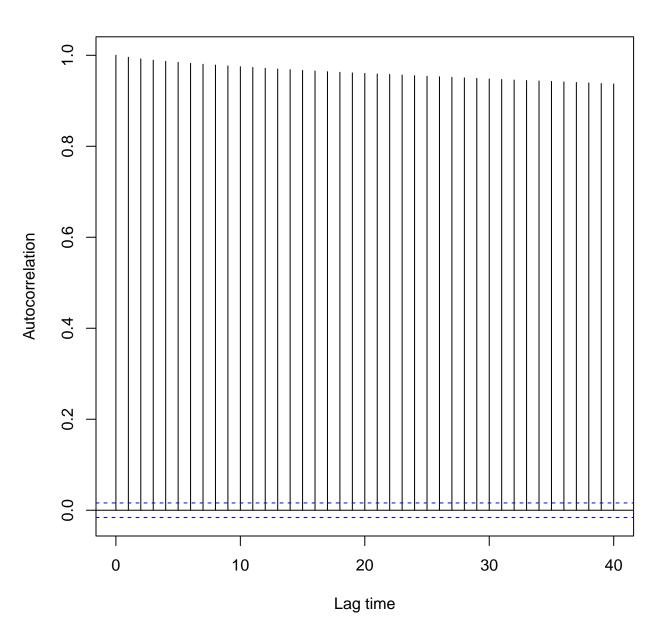
#### **Selection G GGC Mixture: 1**



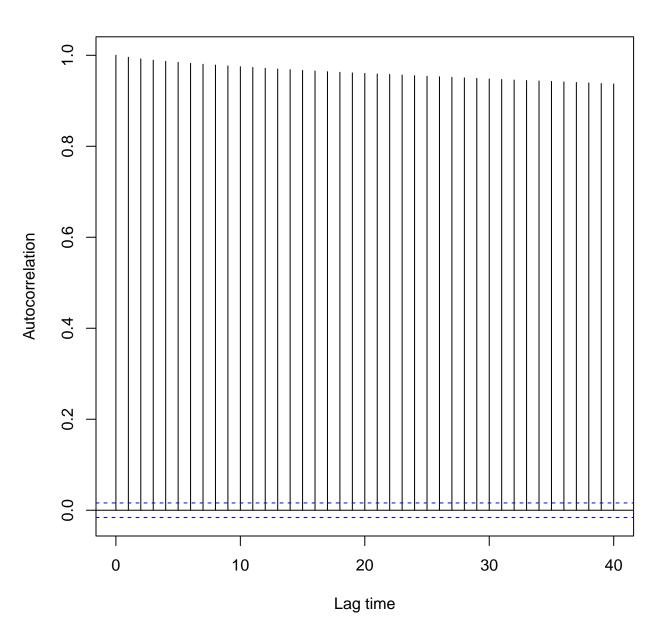
#### **Selection G GGC Mixture: 2**



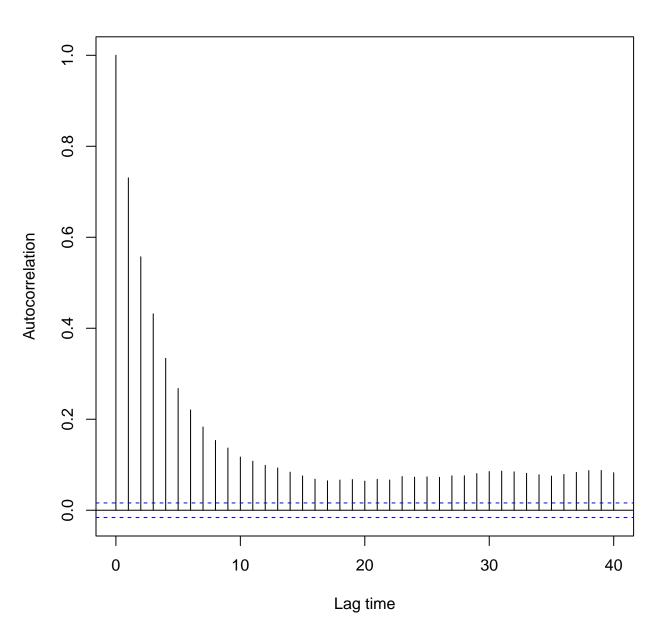
## **Selection G GGG Mixture: 1**



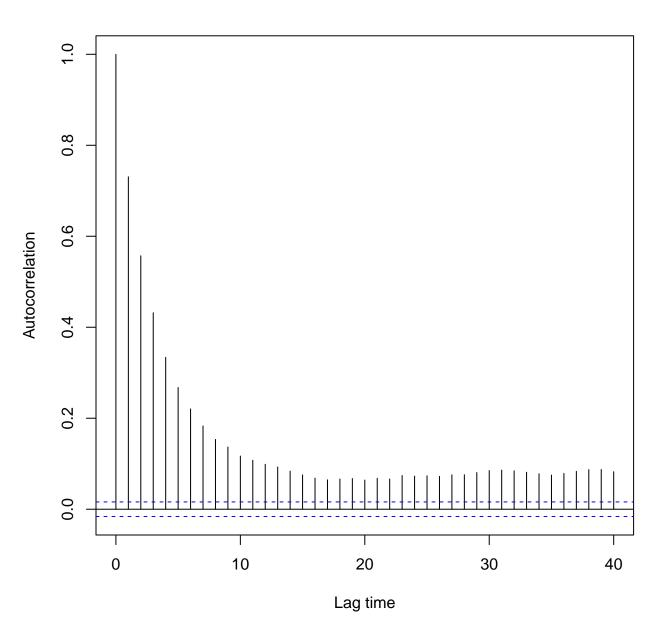
## **Selection G GGG Mixture: 2**



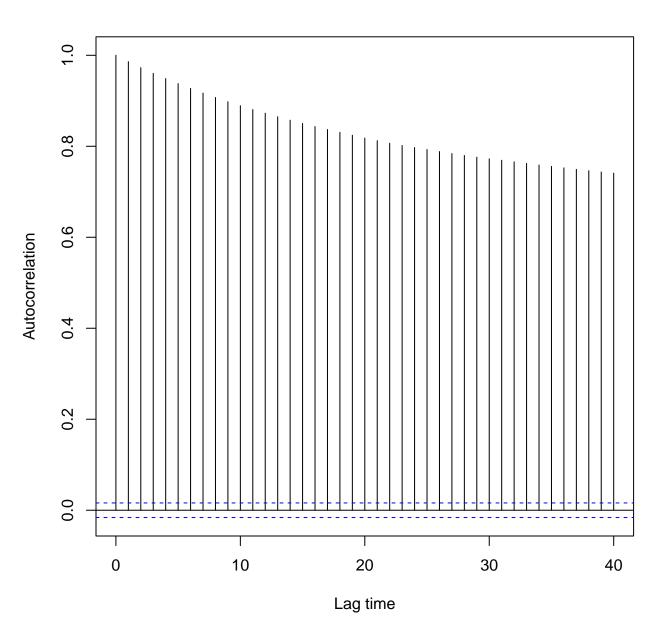
# **Selection H CAC Mixture: 1**



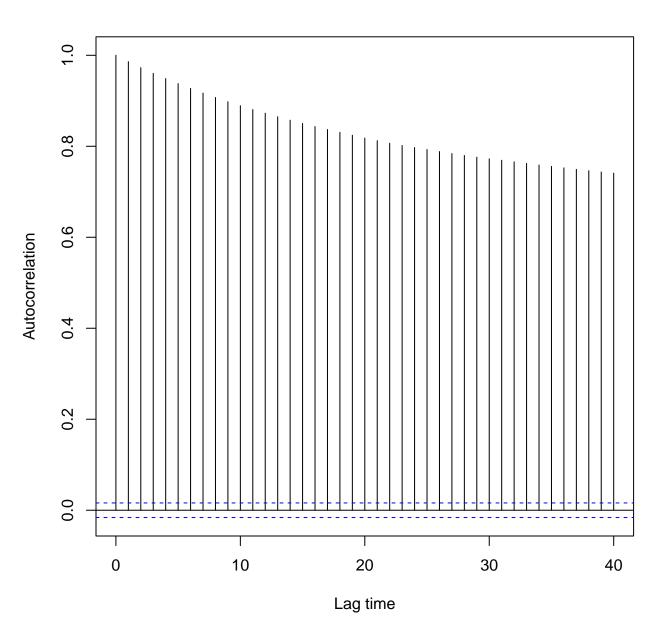
## **Selection H CAC Mixture: 2**



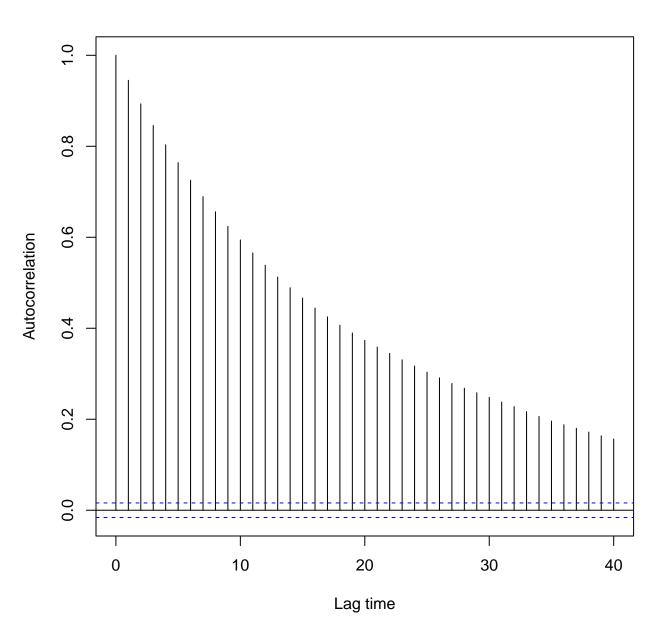
#### **Selection I ATA Mixture: 1**



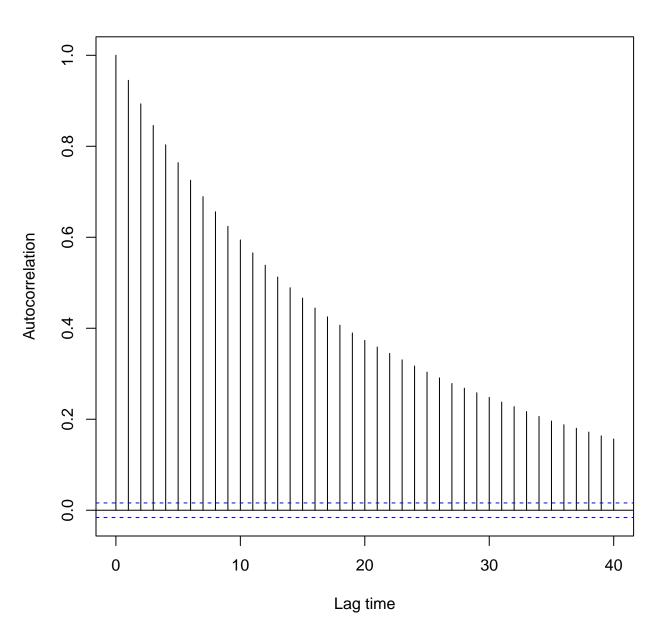
#### **Selection I ATA Mixture: 2**



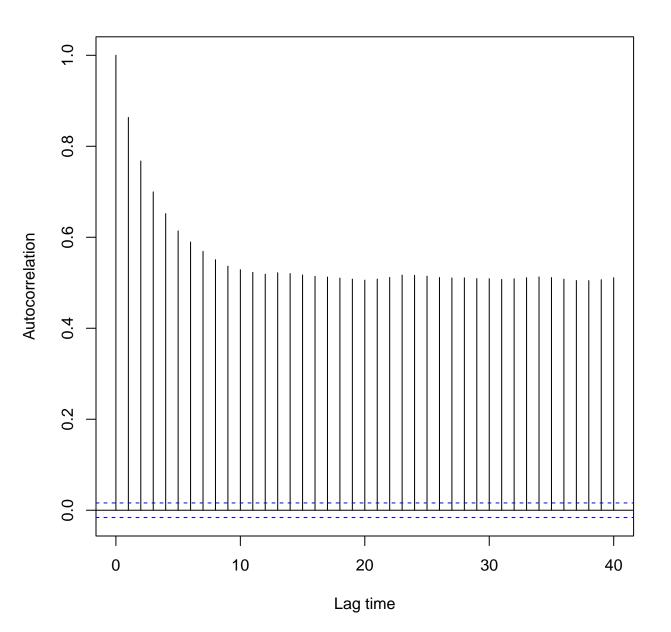
# **Selection I ATC Mixture: 1**



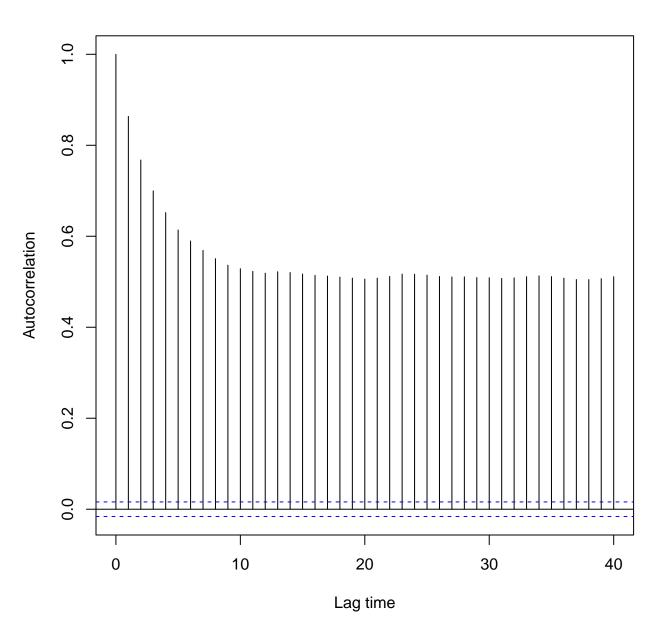
## **Selection I ATC Mixture: 2**



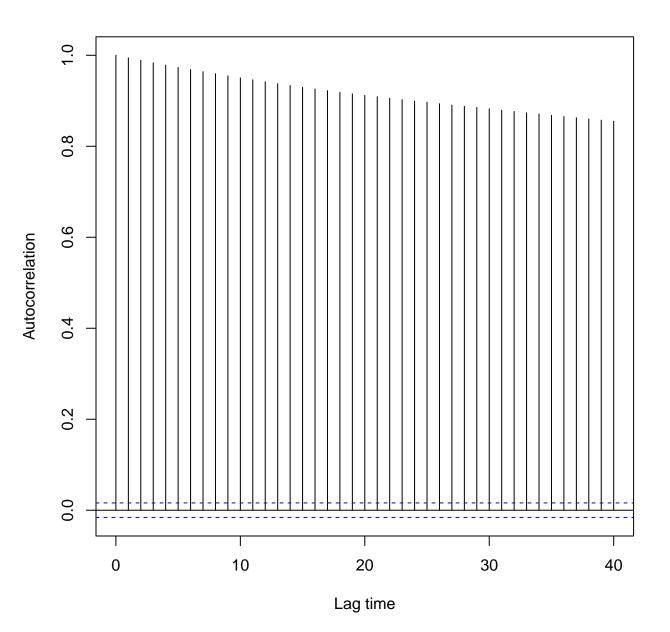
#### **Selection K AAA Mixture: 1**



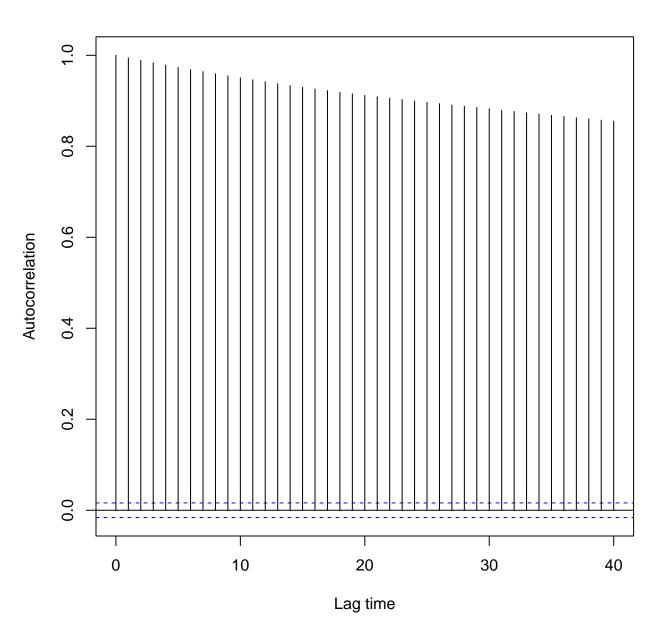
#### **Selection K AAA Mixture: 2**



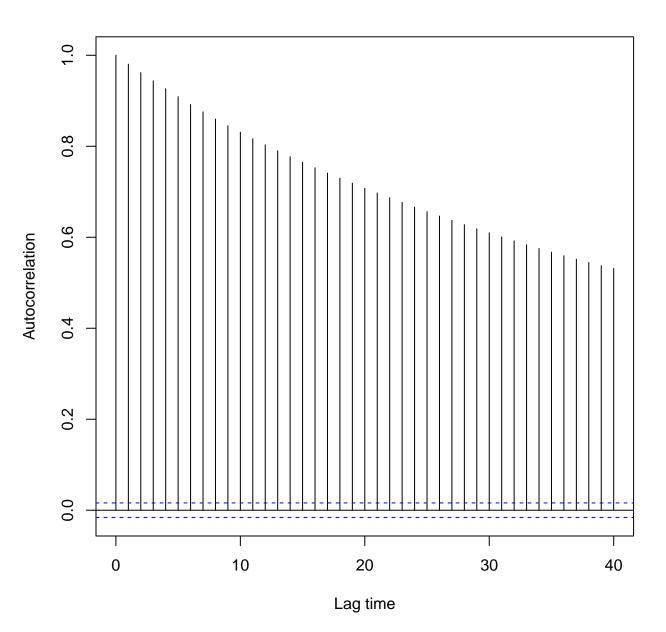
## **Selection L CTA Mixture: 1**



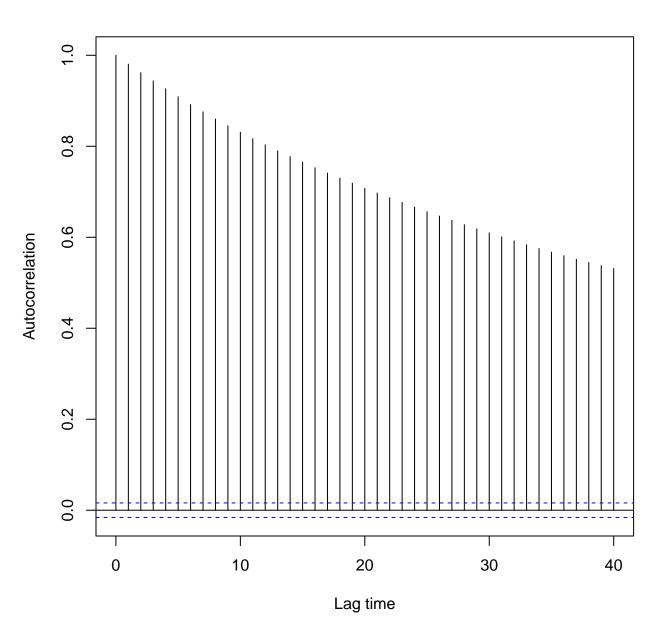
#### **Selection L CTA Mixture: 2**



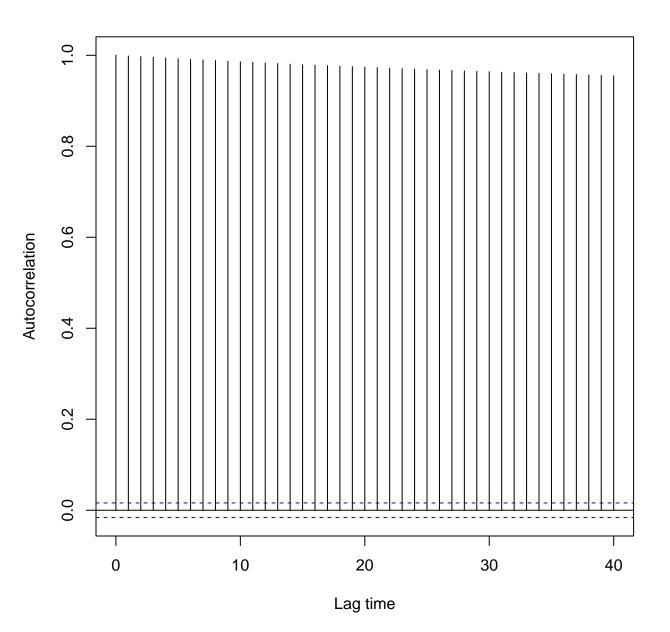
# **Selection L CTC Mixture: 1**



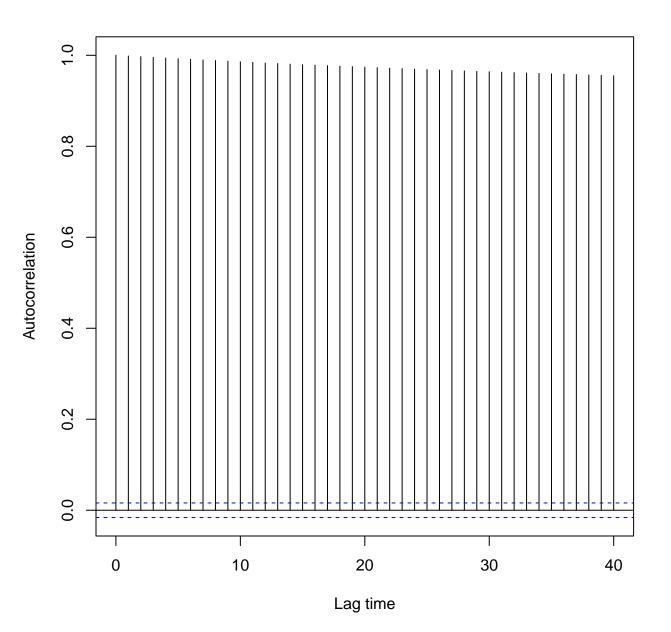
# **Selection L CTC Mixture: 2**



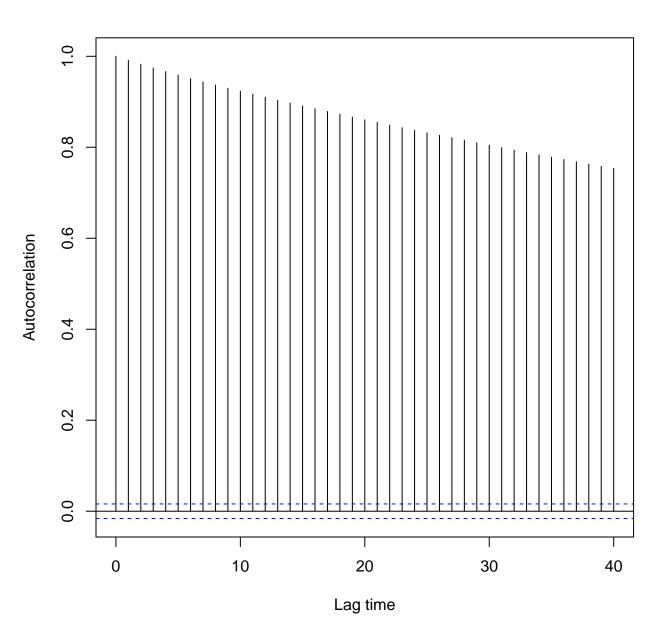
## **Selection L CTG Mixture: 1**



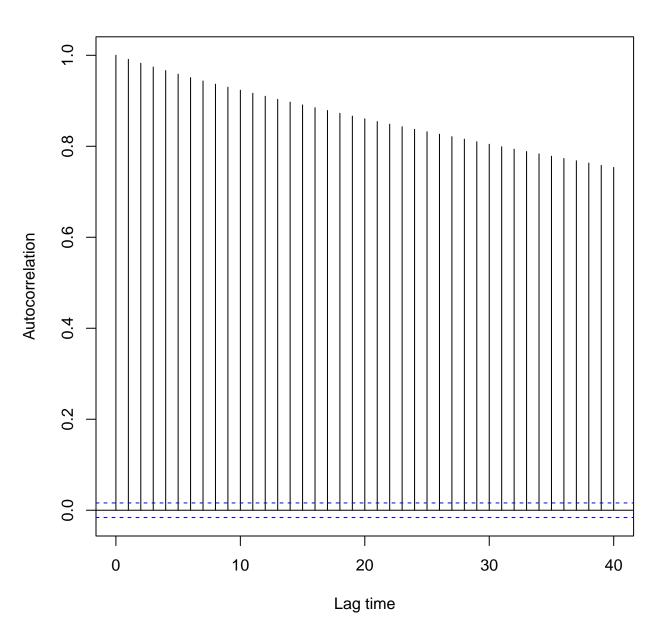
# **Selection L CTG Mixture: 2**



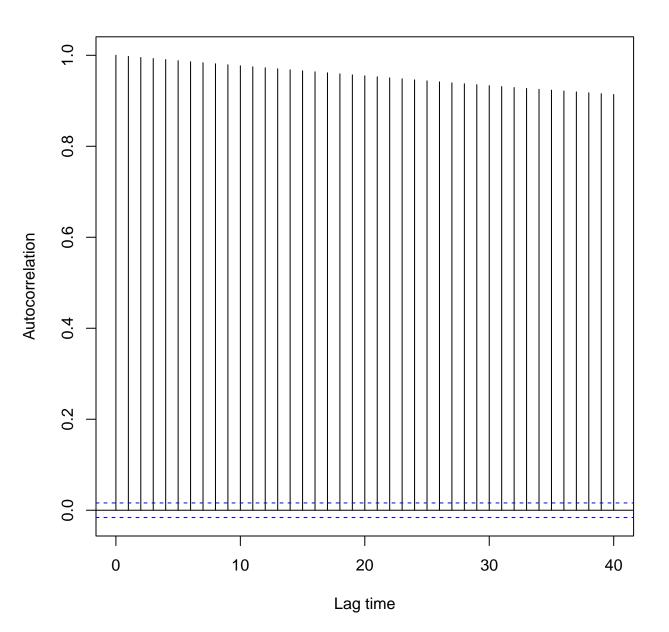
# **Selection L CTT Mixture: 1**



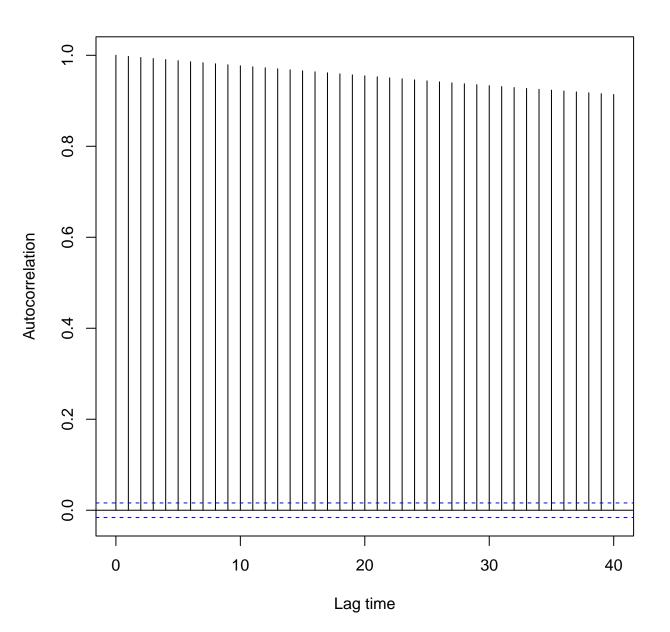
# **Selection L CTT Mixture: 2**



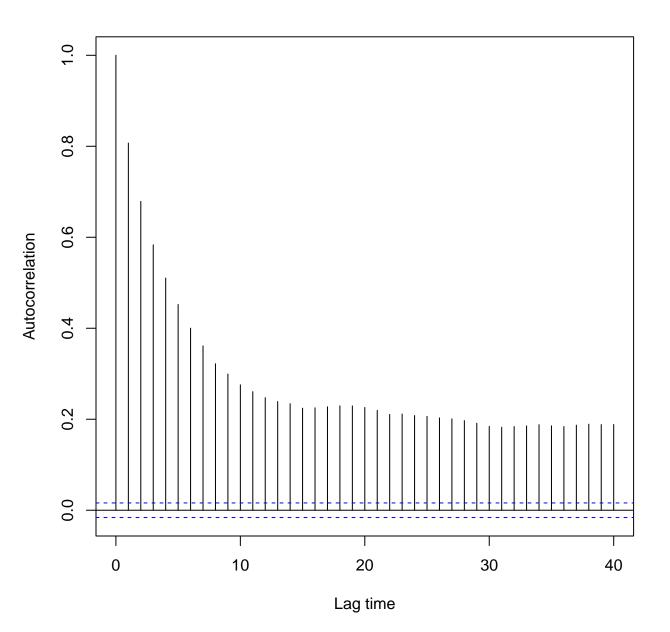
# **Selection L TTA Mixture: 1**



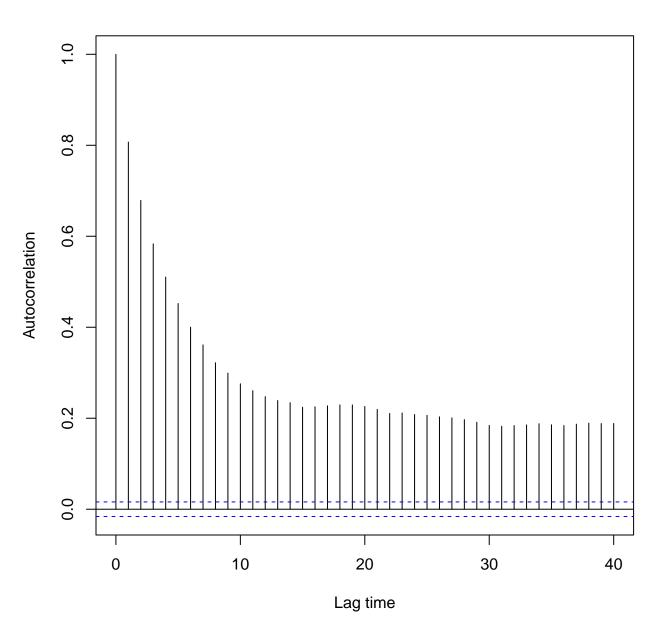
# **Selection L TTA Mixture: 2**



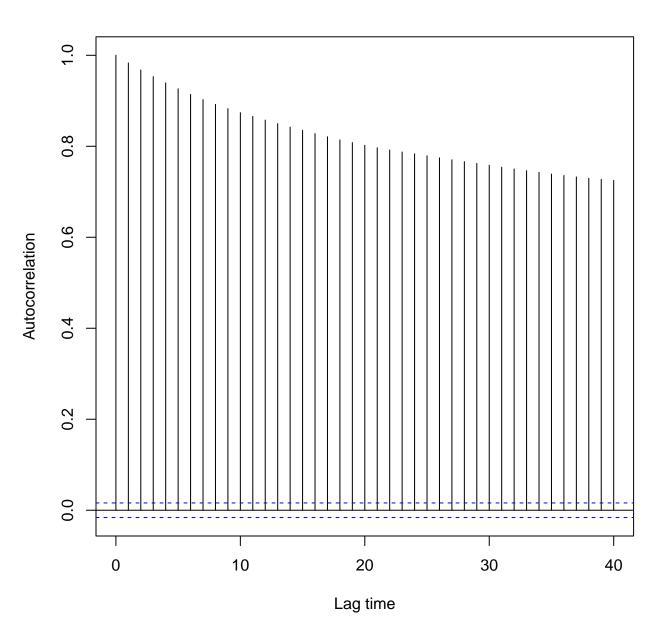
# **Selection N AAC Mixture: 1**



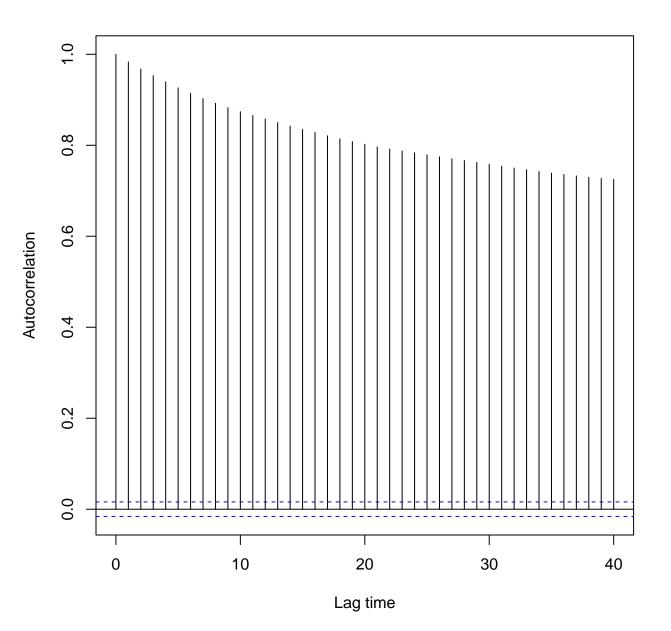
# **Selection N AAC Mixture: 2**



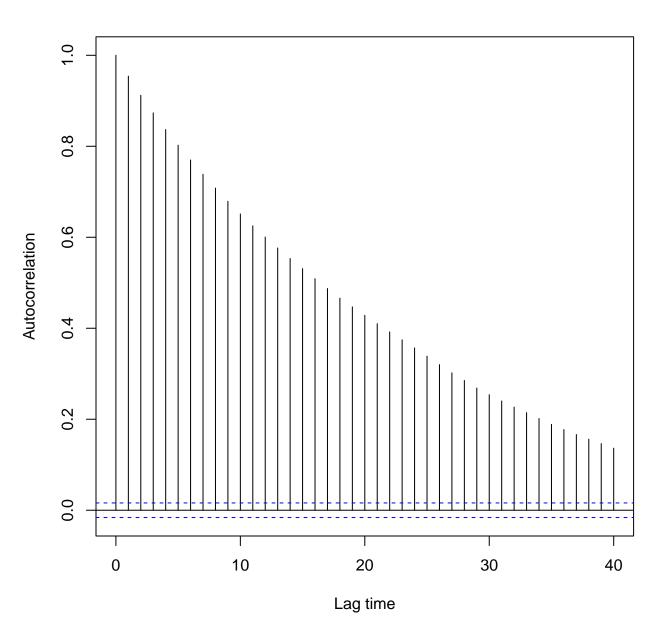
# **Selection P CCA Mixture: 1**



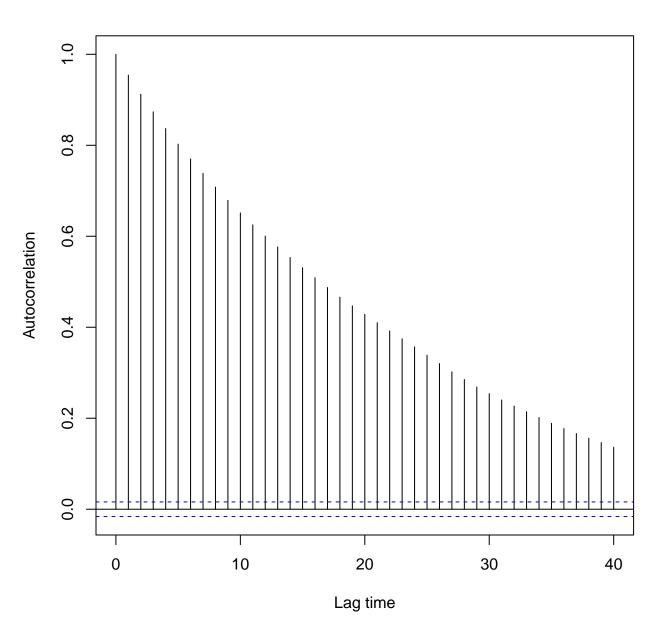
# **Selection P CCA Mixture: 2**



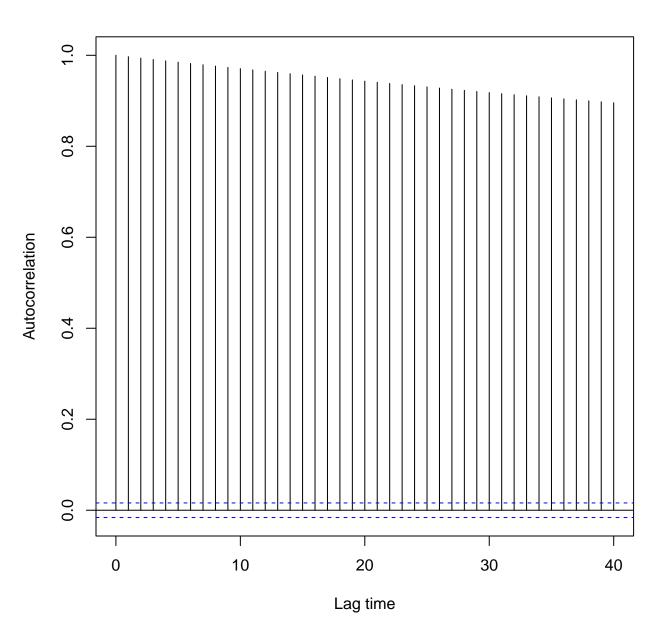
# **Selection P CCC Mixture: 1**



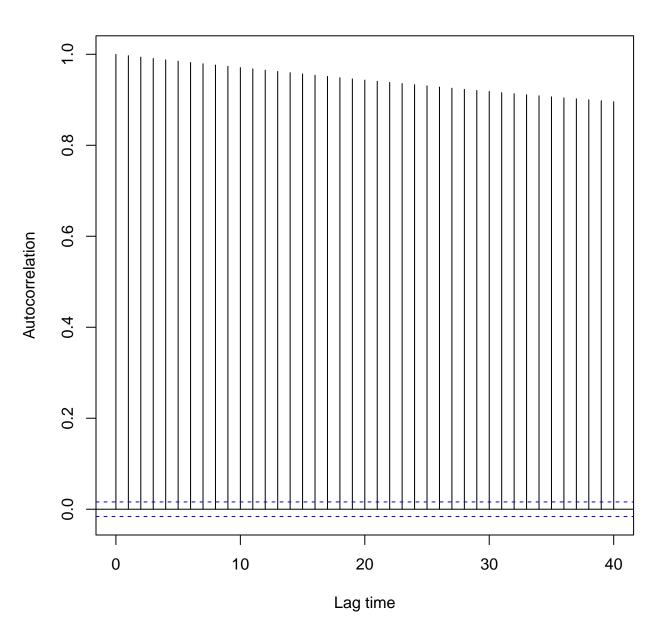
# **Selection P CCC Mixture: 2**



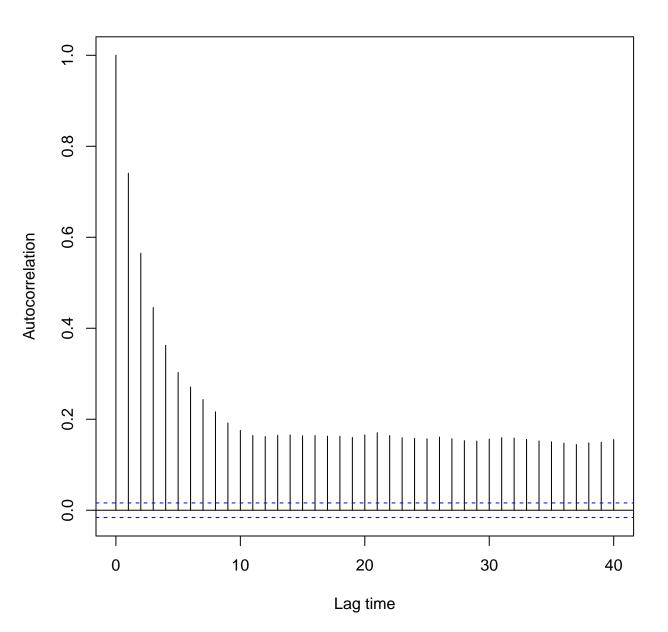
# **Selection P CCG Mixture: 1**



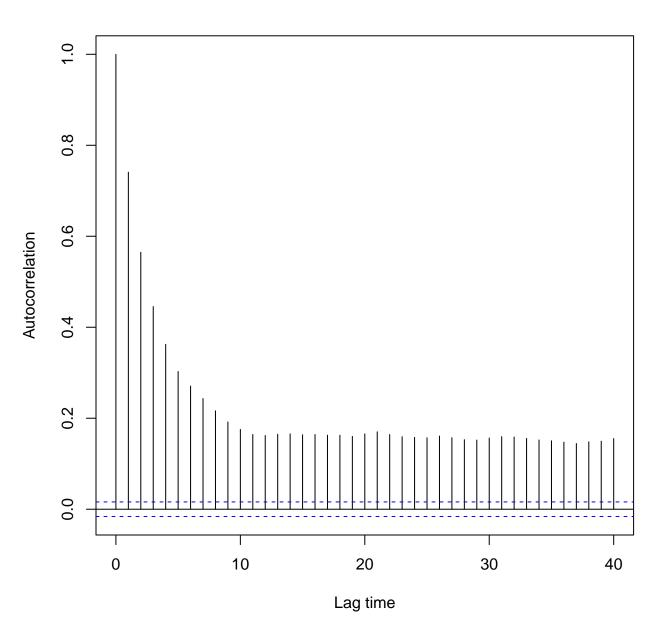
# **Selection P CCG Mixture: 2**



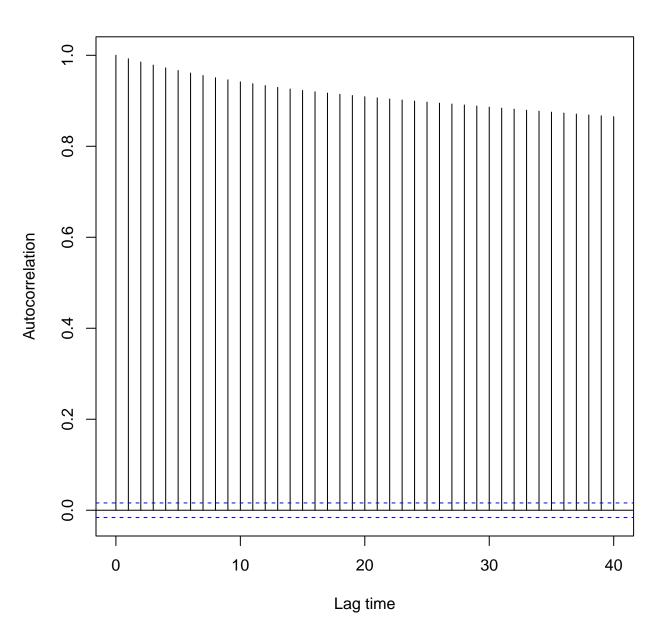
# **Selection Q CAA Mixture: 1**



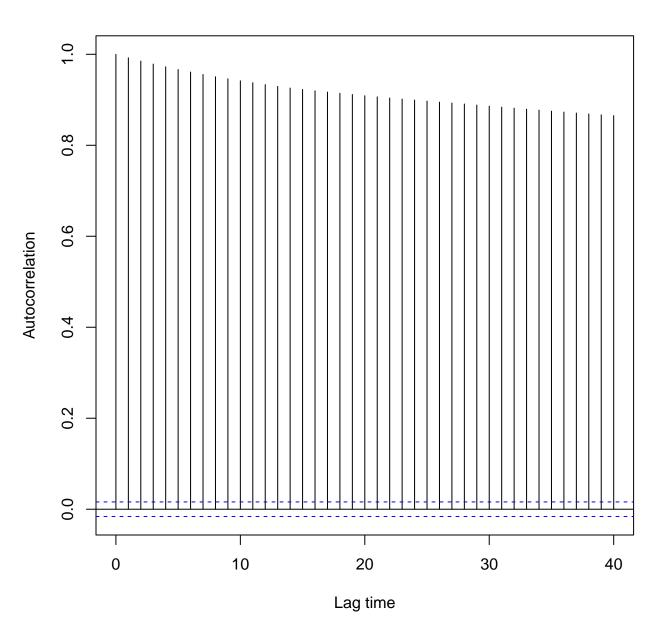
# **Selection Q CAA Mixture: 2**



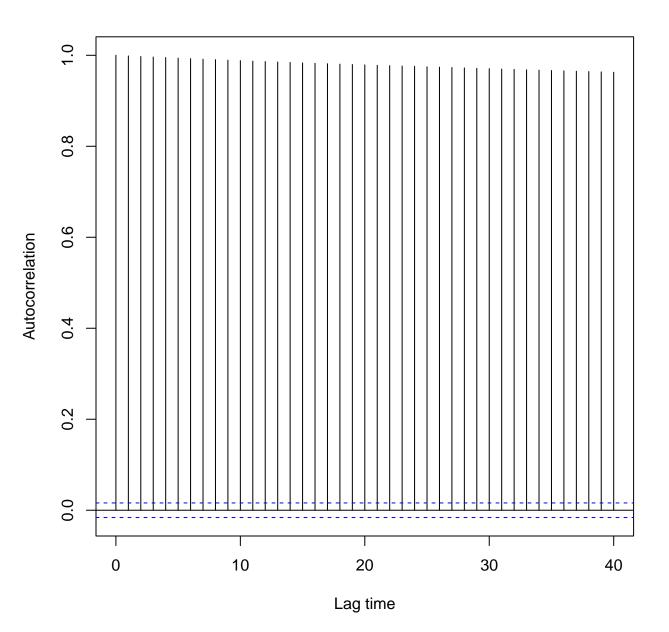
## **Selection R AGA Mixture: 1**



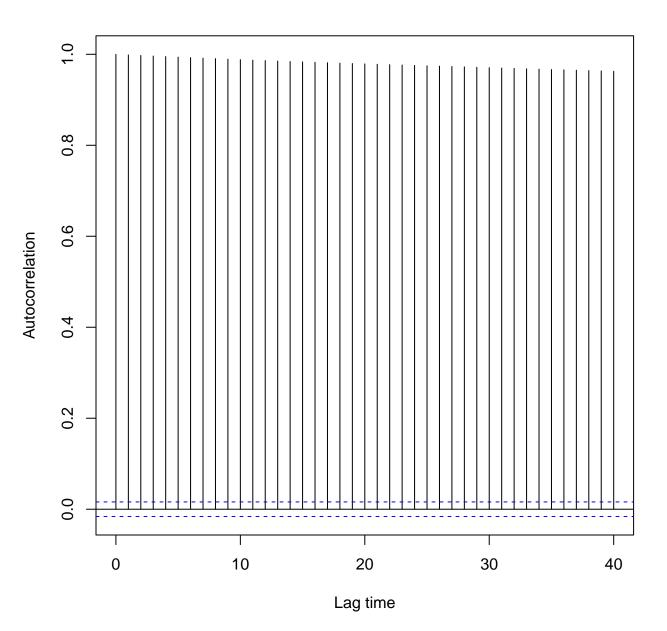
## **Selection R AGA Mixture: 2**



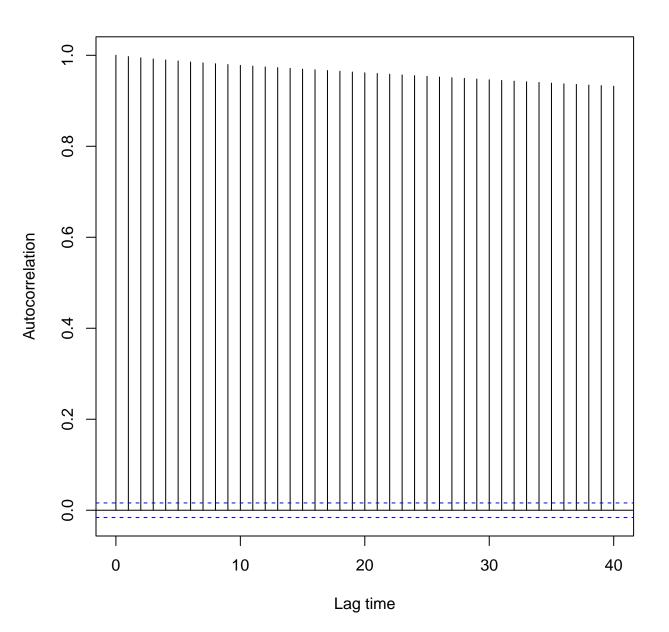
# **Selection R AGG Mixture: 1**



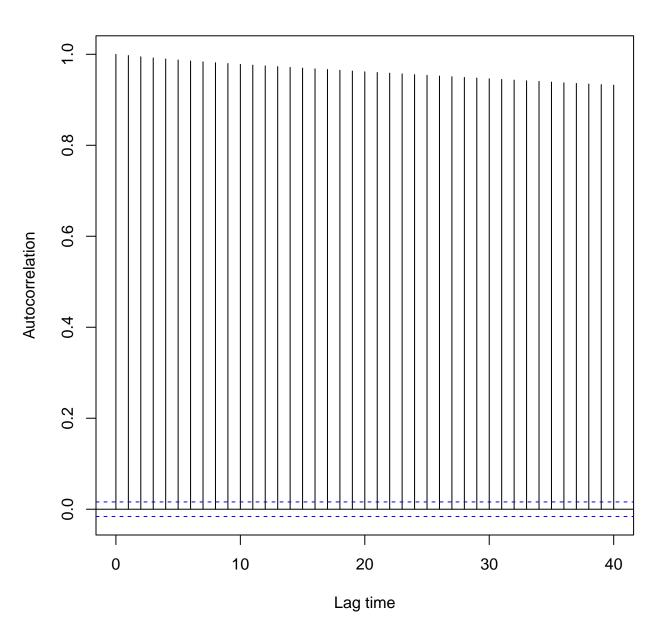
# **Selection R AGG Mixture: 2**



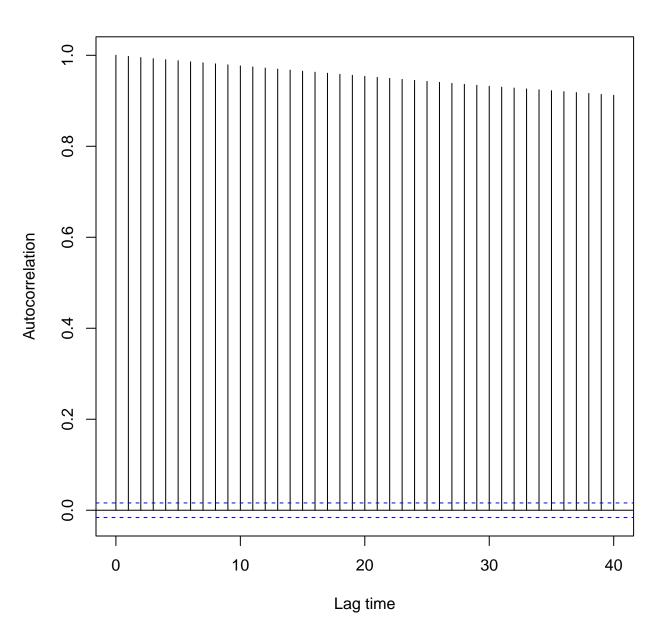
## **Selection R CGA Mixture: 1**



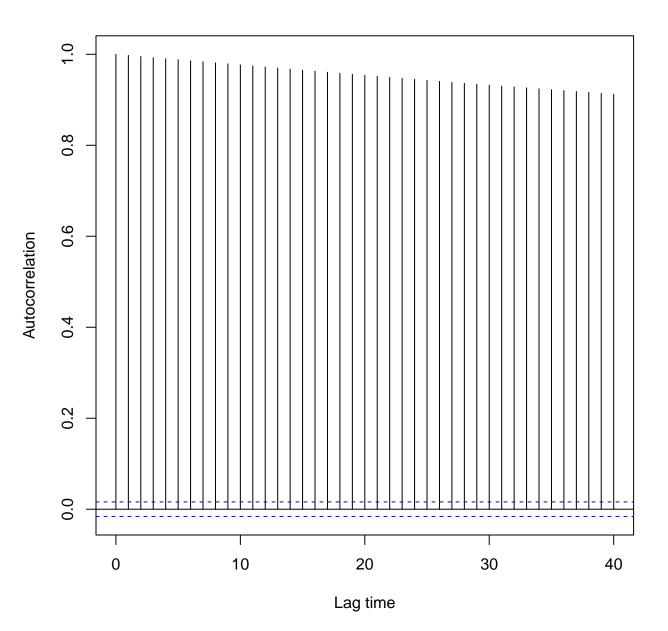
# **Selection R CGA Mixture: 2**



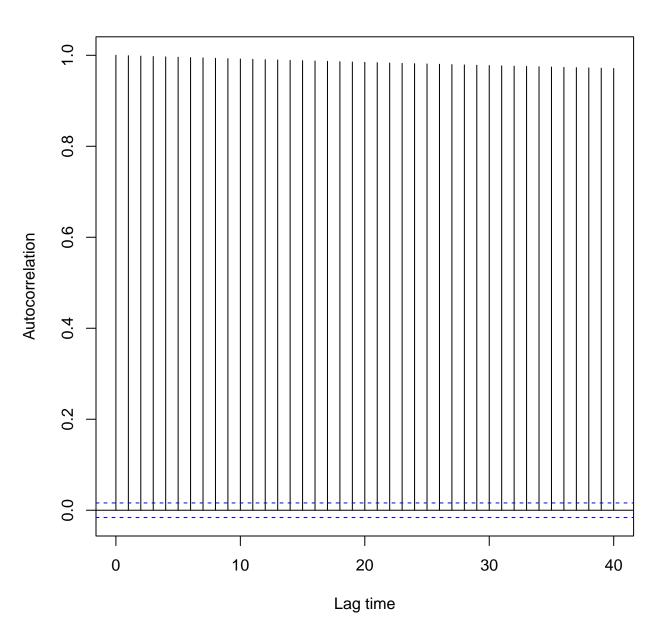
# **Selection R CGC Mixture: 1**



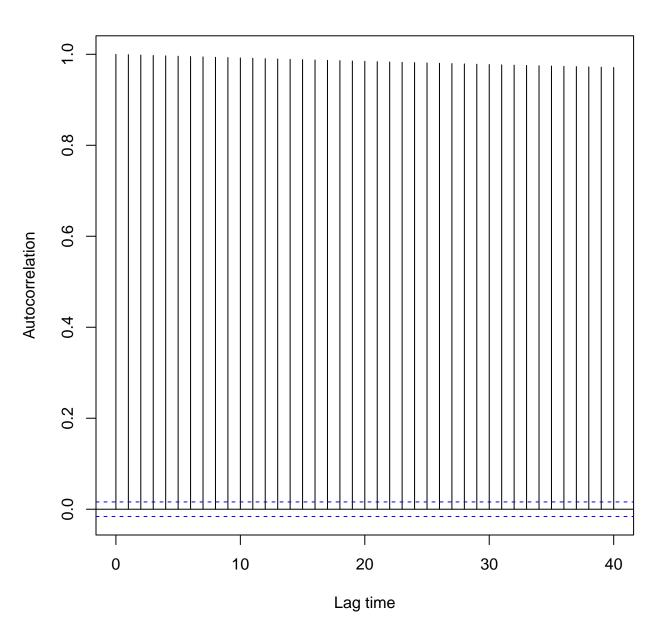
# **Selection R CGC Mixture: 2**



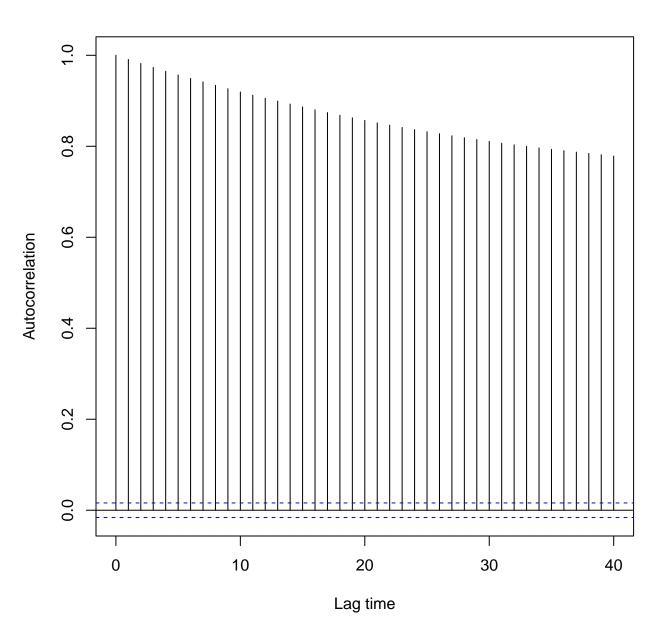
# **Selection R CGG Mixture: 1**



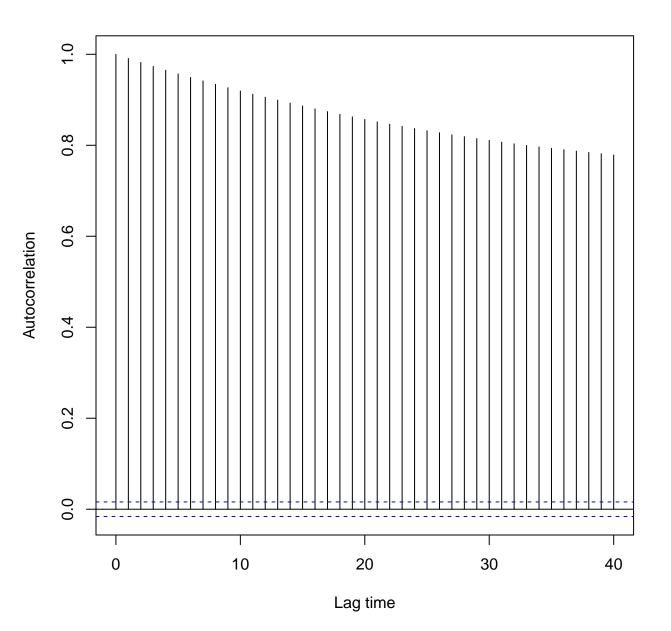
## **Selection R CGG Mixture: 2**



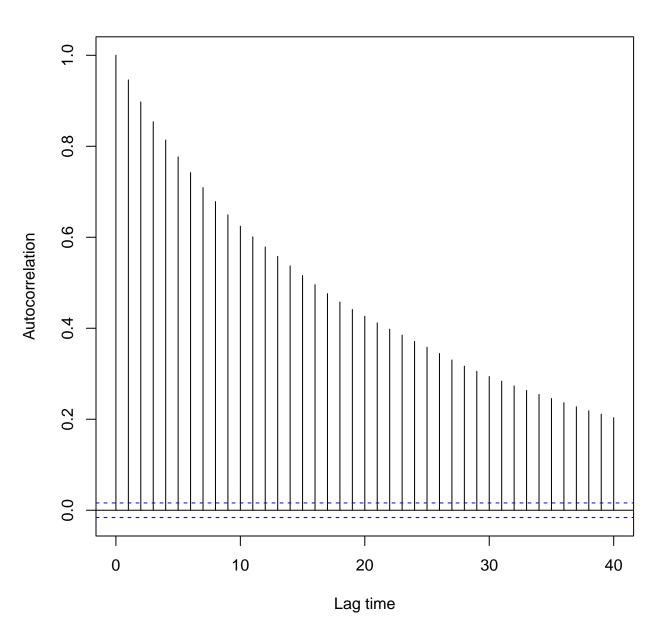
## **Selection S TCA Mixture: 1**



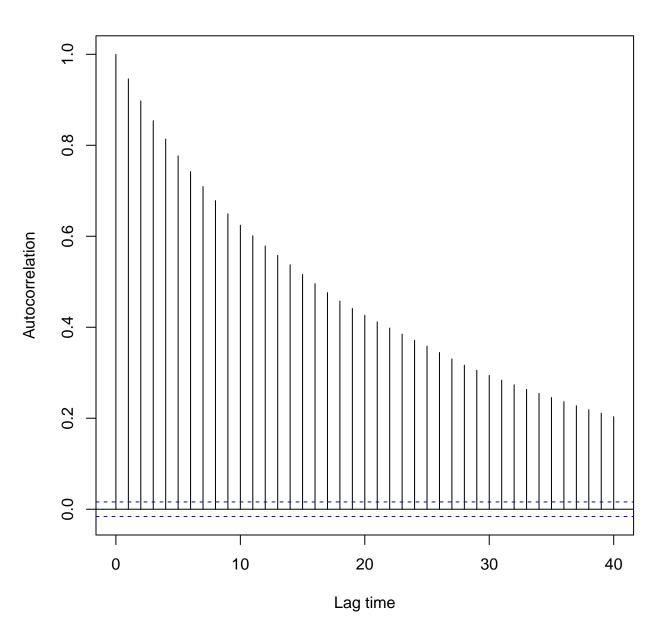
## **Selection S TCA Mixture: 2**



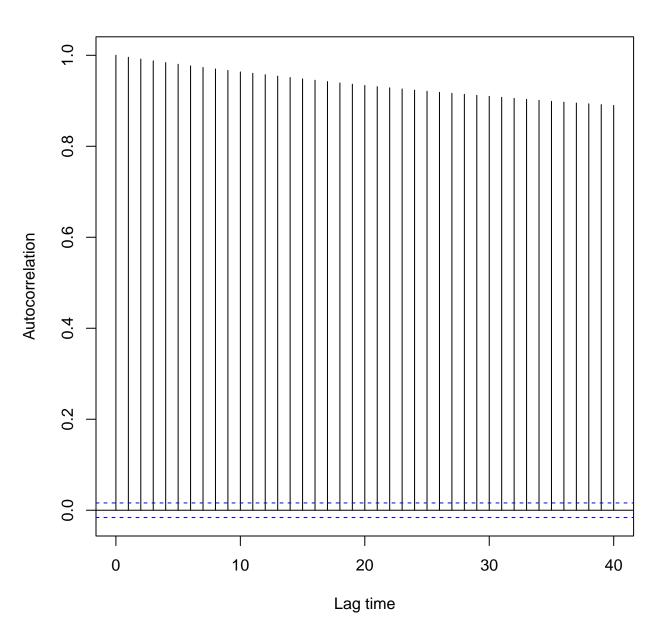
# **Selection S TCC Mixture: 1**



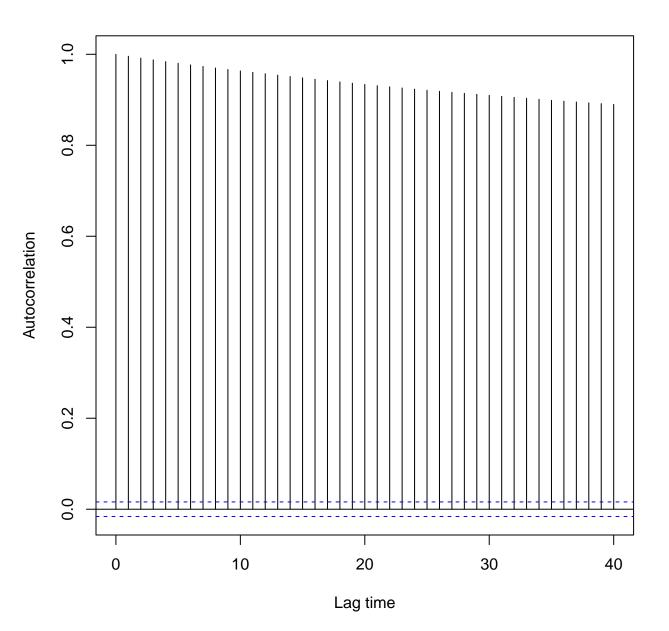
# **Selection S TCC Mixture: 2**



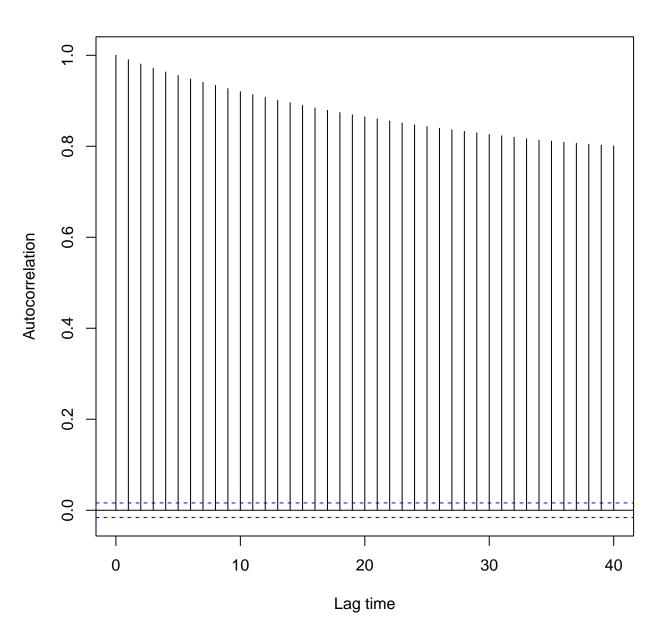
## **Selection S TCG Mixture: 1**



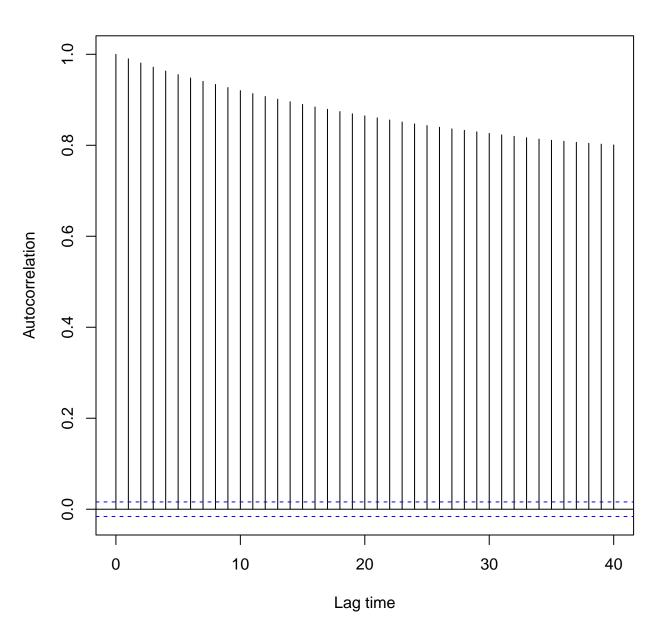
# **Selection S TCG Mixture: 2**



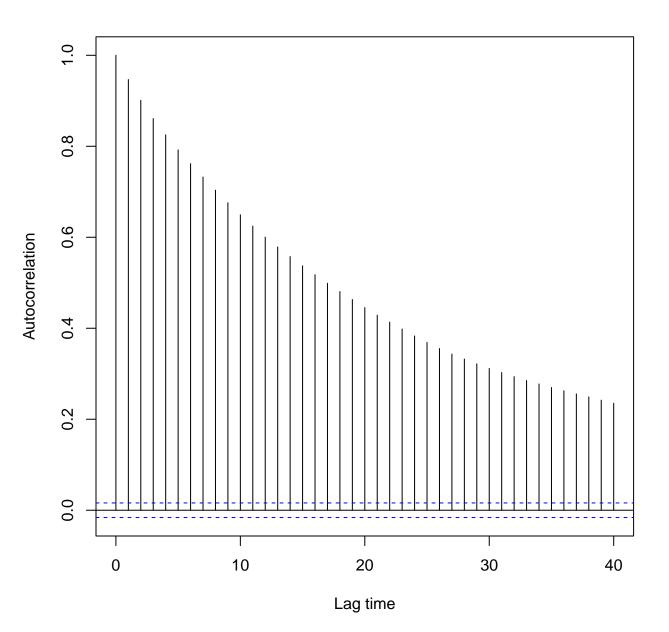
# **Selection T ACA Mixture: 1**



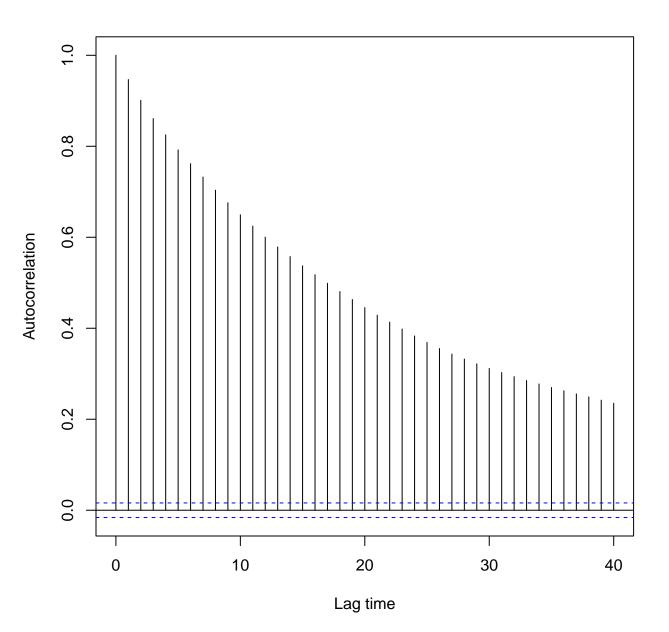
## **Selection T ACA Mixture: 2**



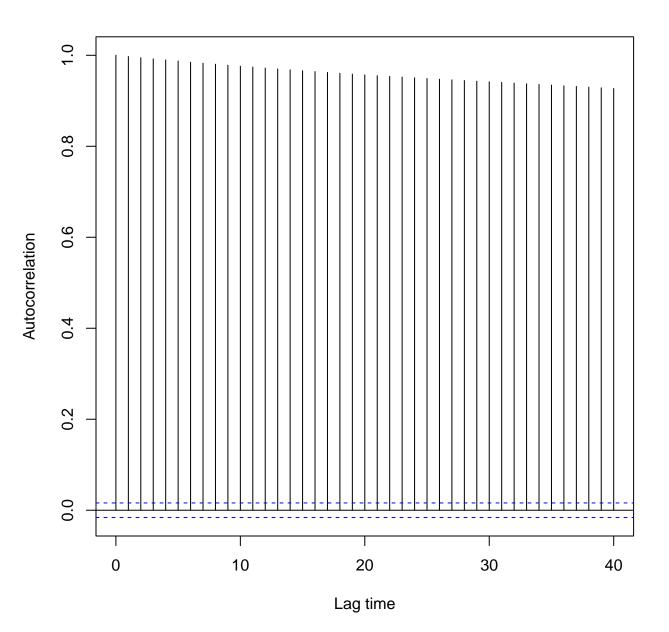
# **Selection T ACC Mixture: 1**



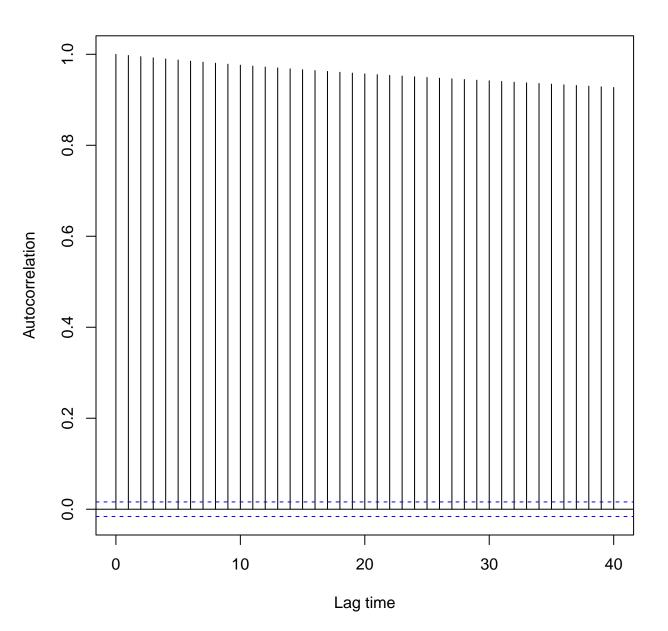
# **Selection T ACC Mixture: 2**



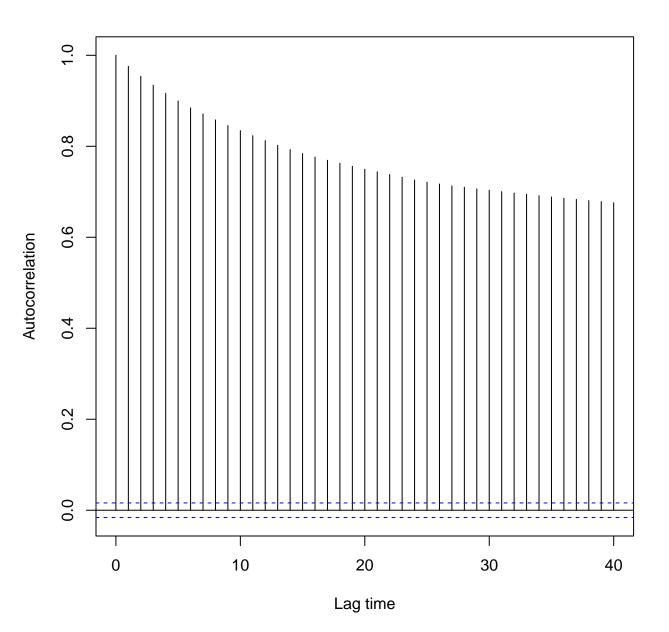
### **Selection T ACG Mixture: 1**



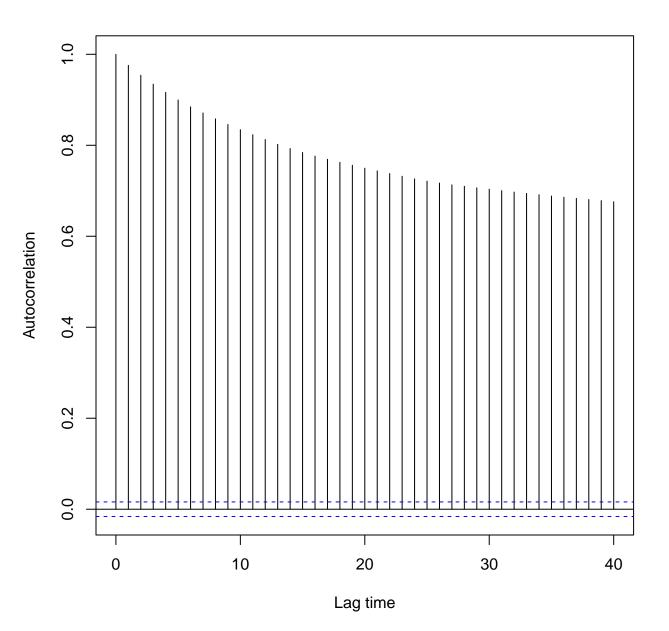
### **Selection T ACG Mixture: 2**



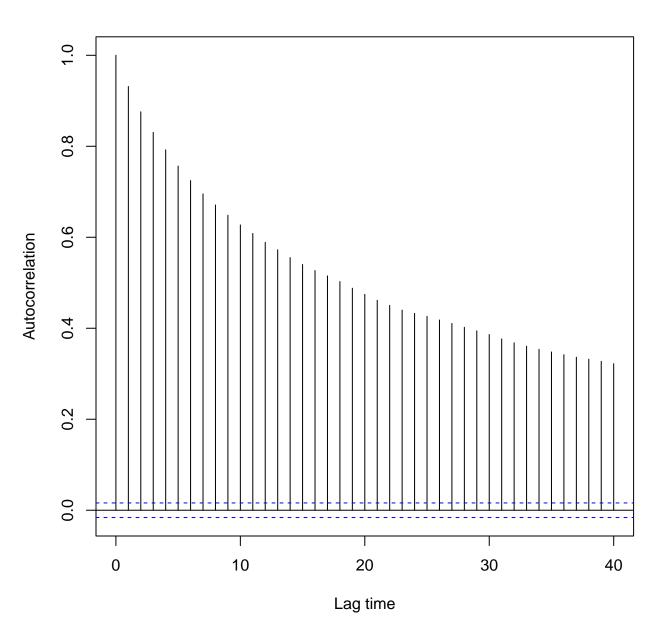
### **Selection V GTA Mixture: 1**



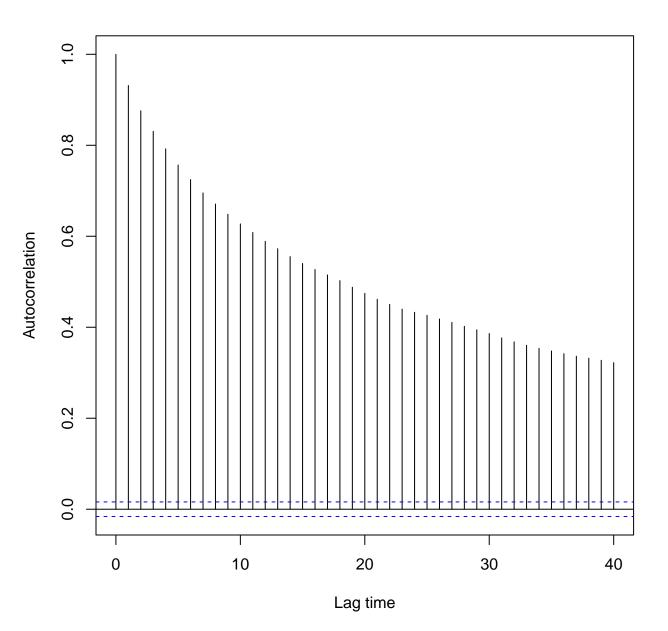
### **Selection V GTA Mixture: 2**



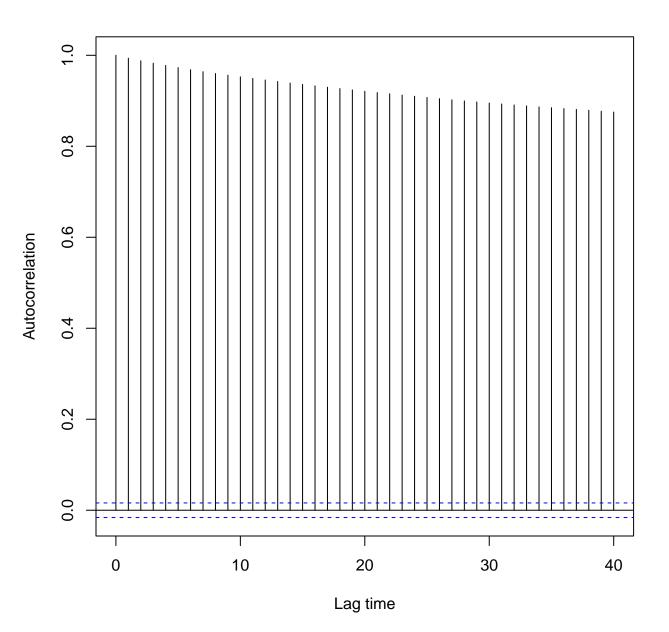
## **Selection V GTC Mixture: 1**



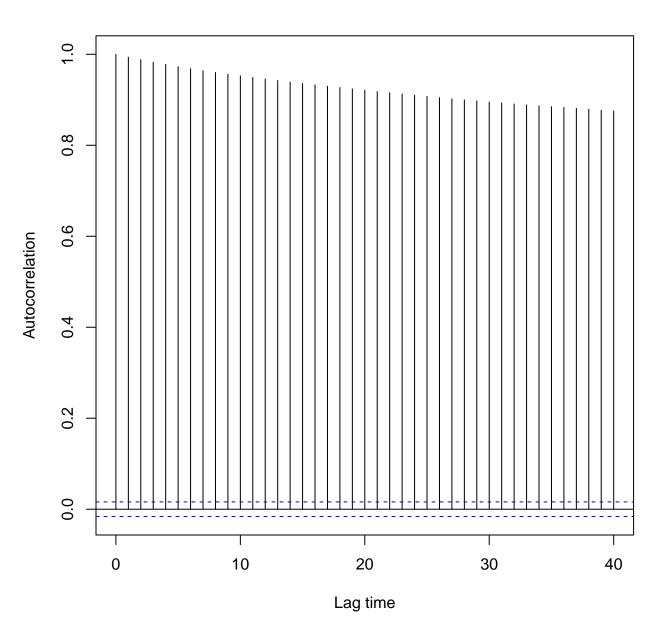
## **Selection V GTC Mixture: 2**



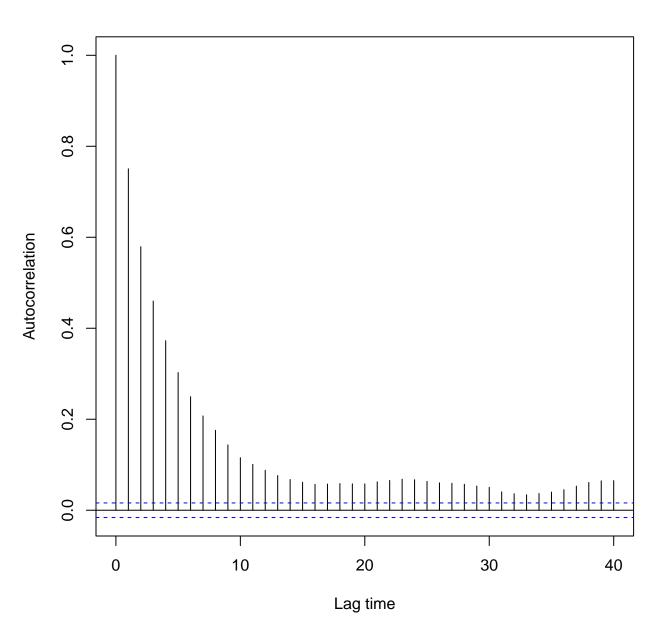
## **Selection V GTG Mixture: 1**



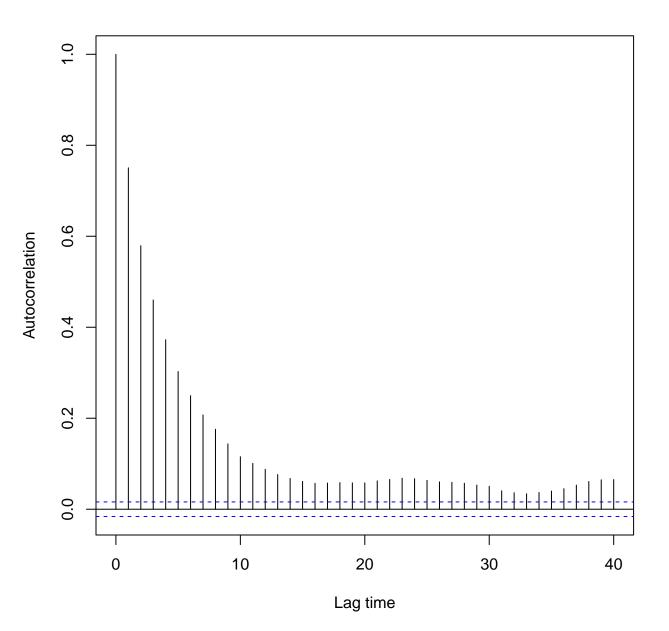
### **Selection V GTG Mixture: 2**



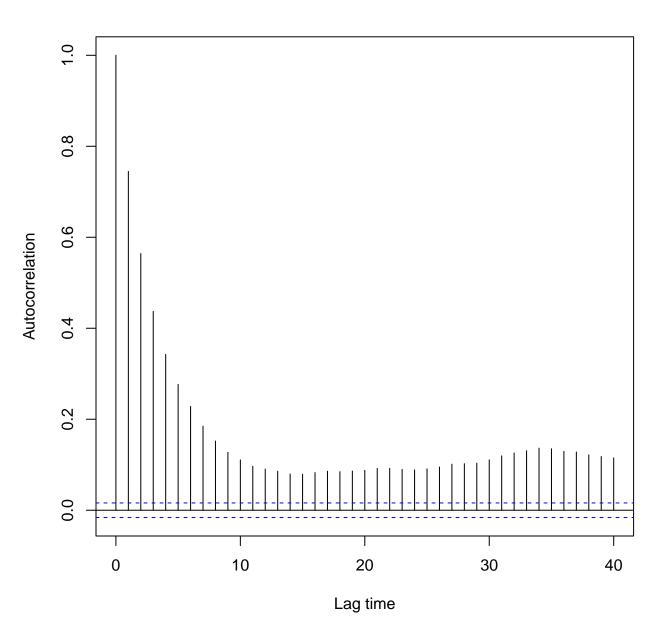
# **Selection Y TAC Mixture: 1**



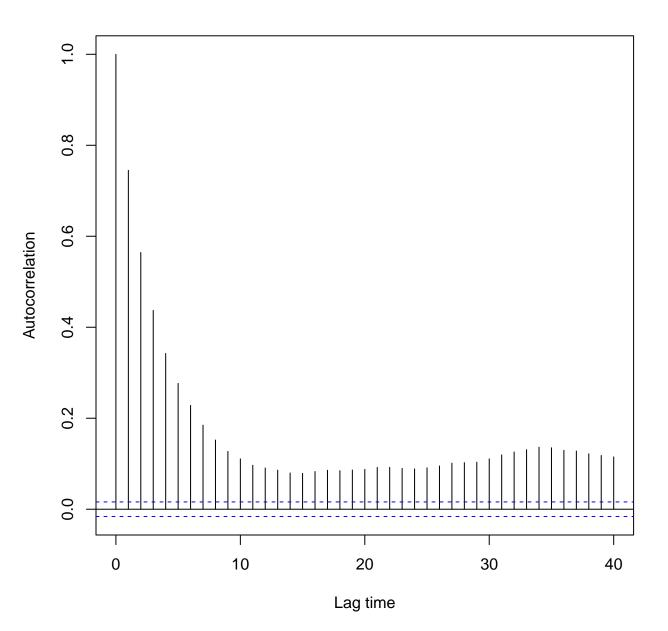
## **Selection Y TAC Mixture: 2**



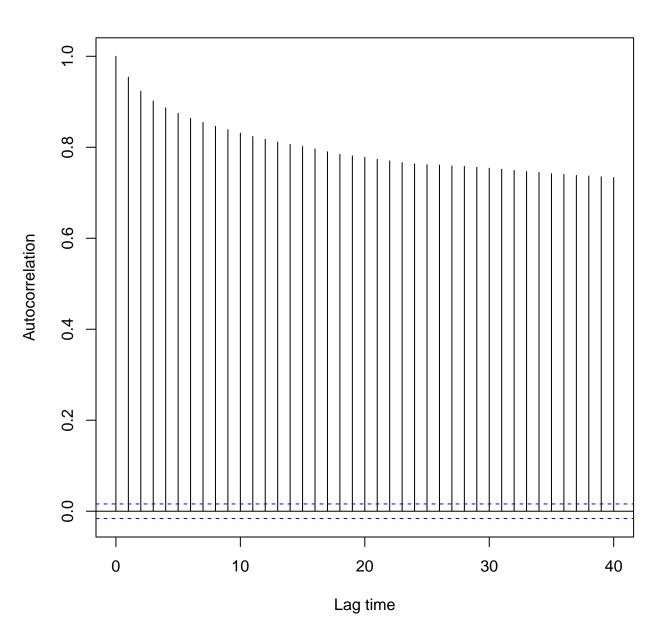
### **Selection Z AGC Mixture: 1**



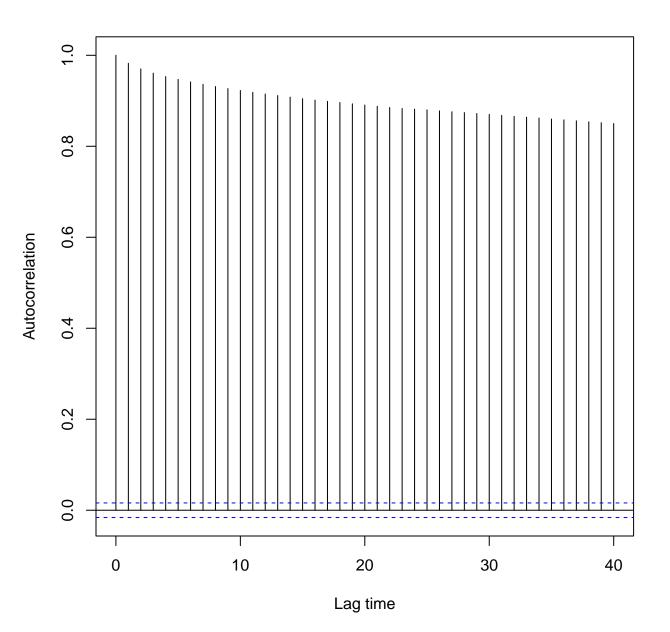
## **Selection Z AGC Mixture: 2**



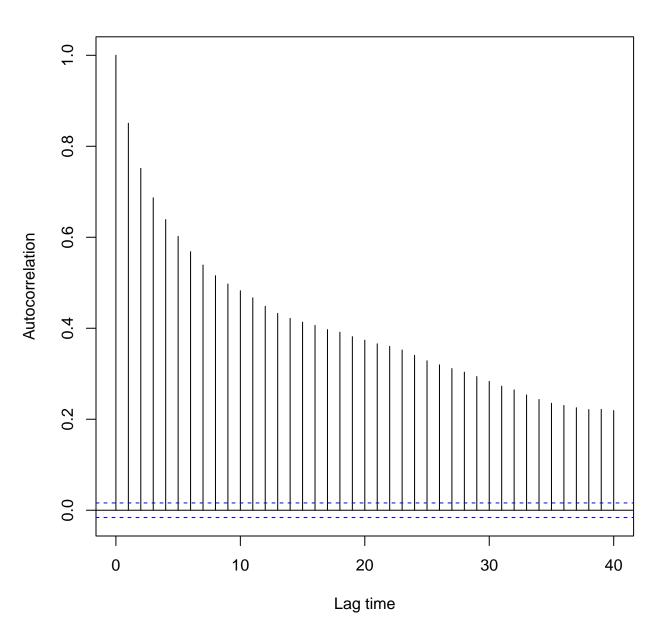
### **Mutation A GCA Mixture: 1**



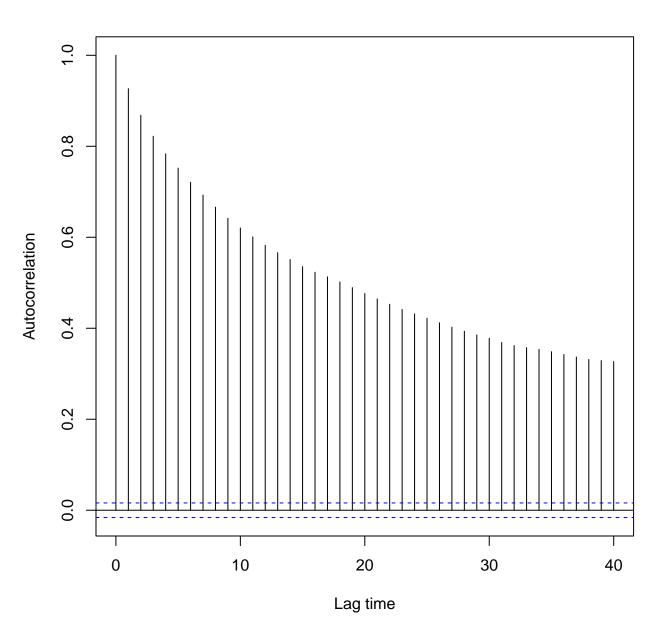
### **Mutation A GCA Mixture: 2**



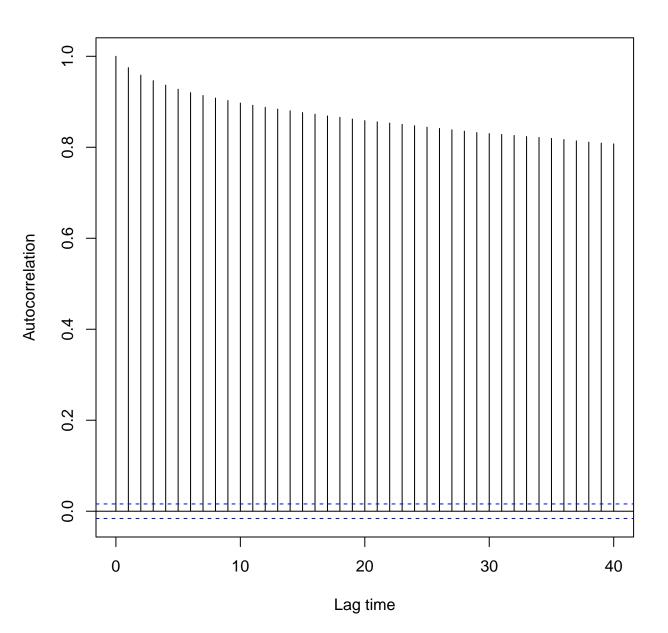
# **Mutation A GCC Mixture: 1**



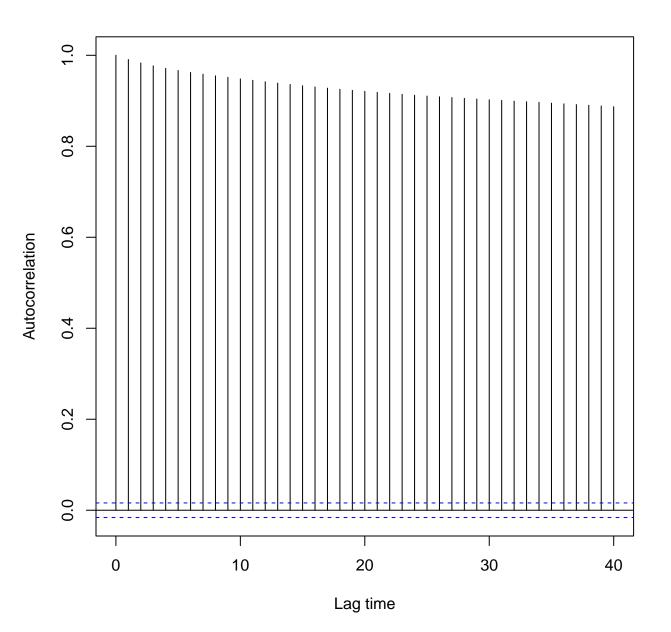
## **Mutation A GCC Mixture: 2**



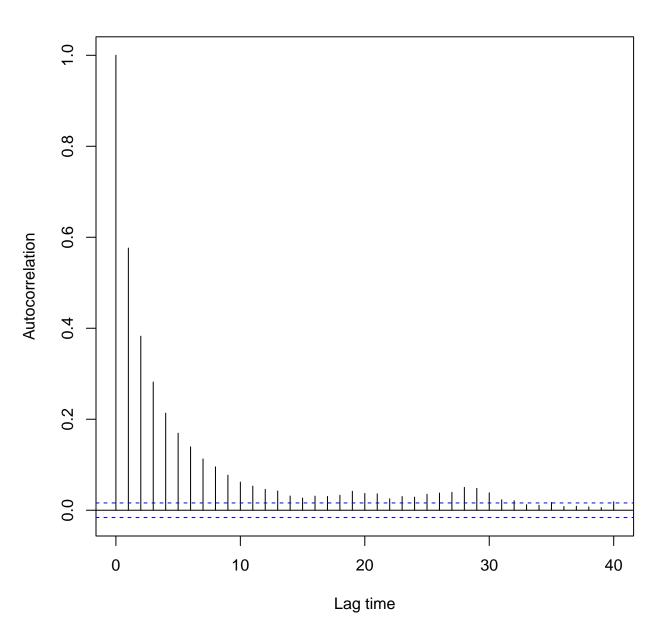
## **Mutation A GCG Mixture: 1**



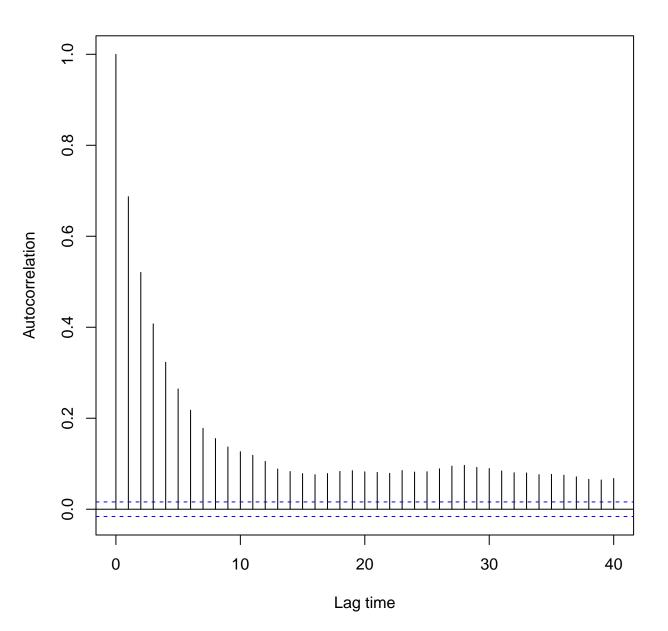
## **Mutation A GCG Mixture: 2**



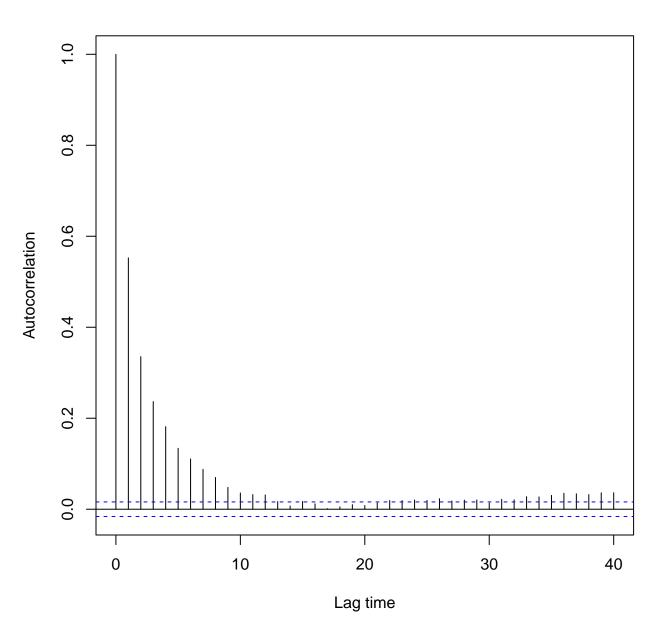
## **Mutation C TGC Mixture: 1**



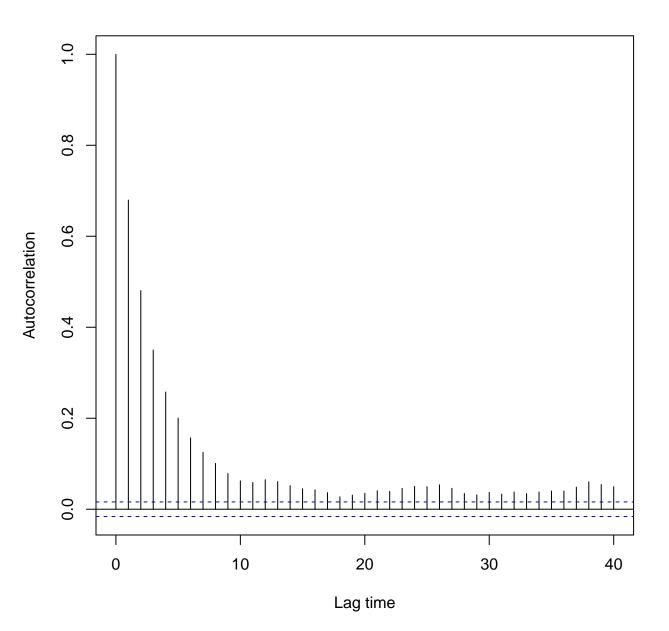
## **Mutation C TGC Mixture: 2**



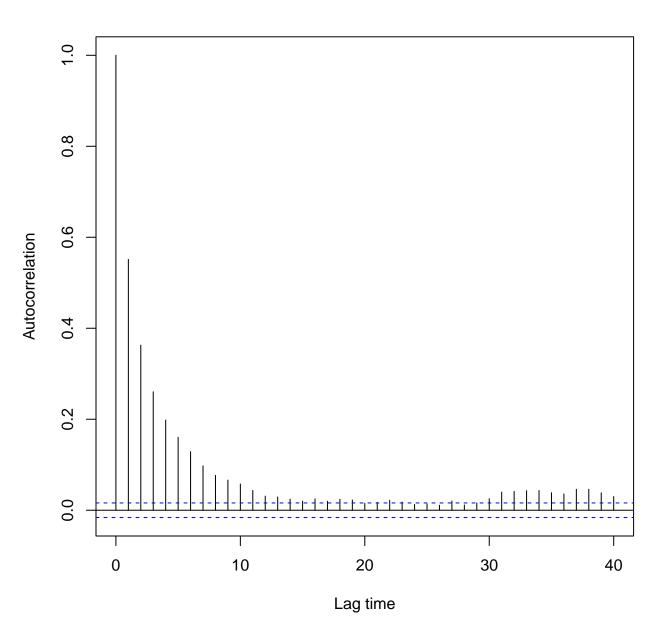
## **Mutation D GAC Mixture: 1**



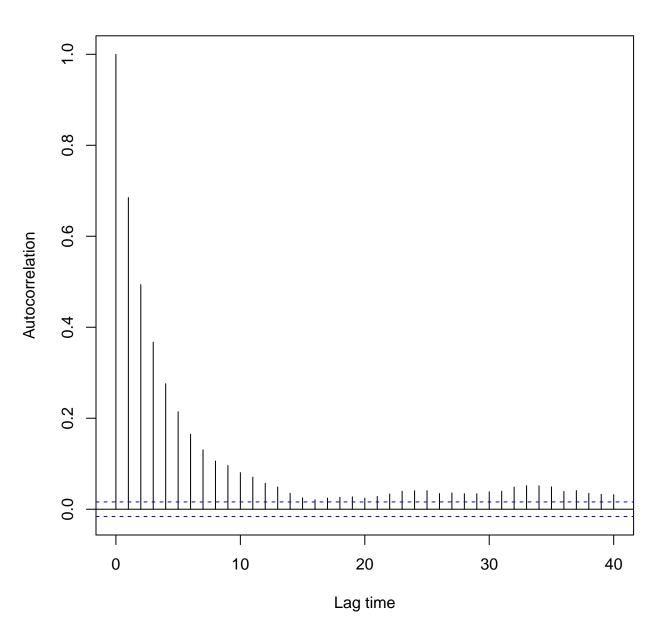
# **Mutation D GAC Mixture: 2**



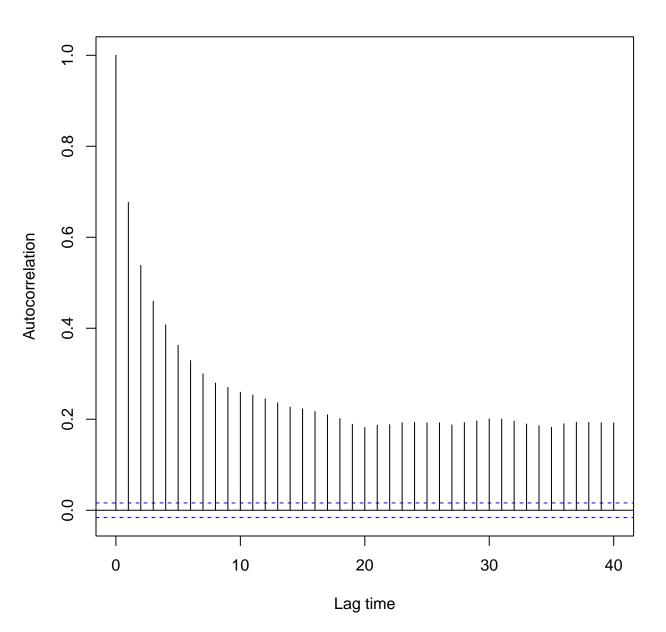
### **Mutation E GAA Mixture: 1**



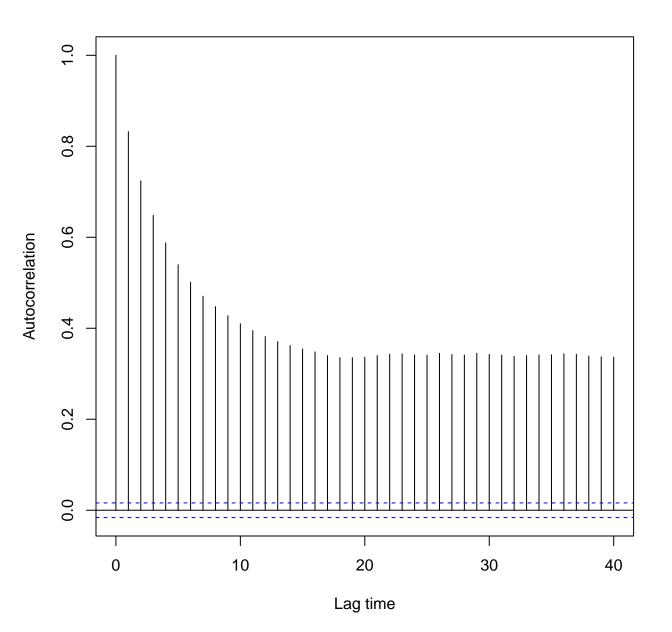
### **Mutation E GAA Mixture: 2**



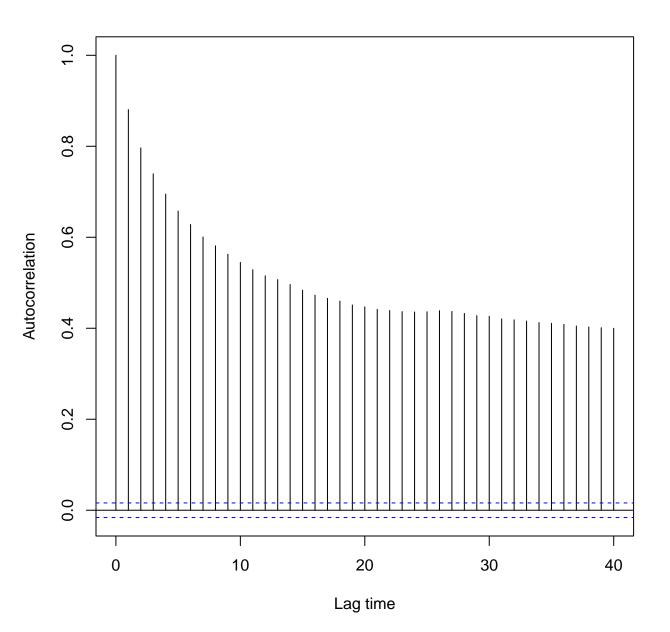
## **Mutation F TTC Mixture: 1**



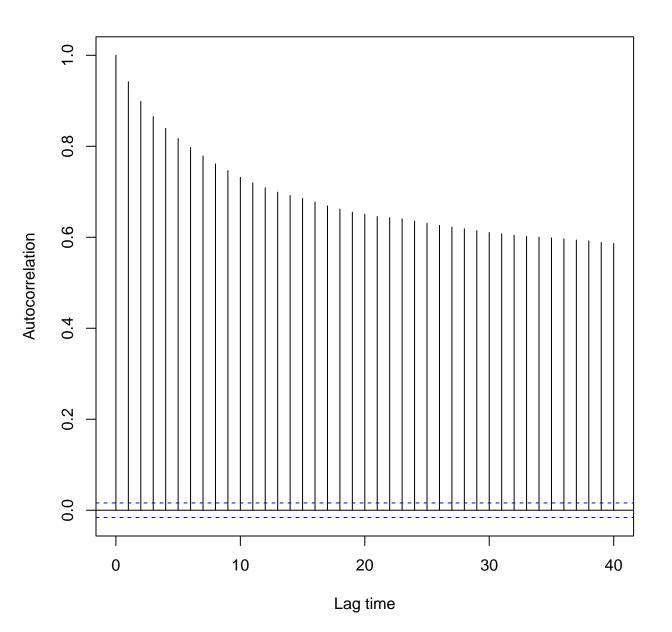
## **Mutation F TTC Mixture: 2**



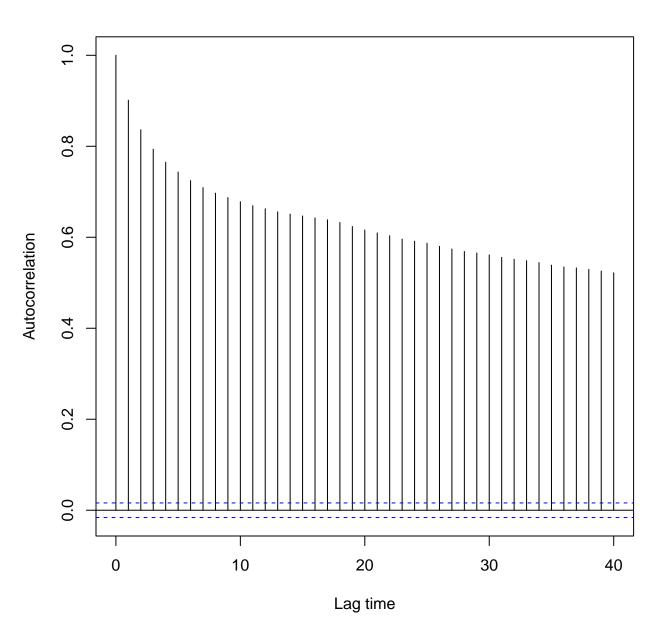
## **Mutation G GGA Mixture: 1**



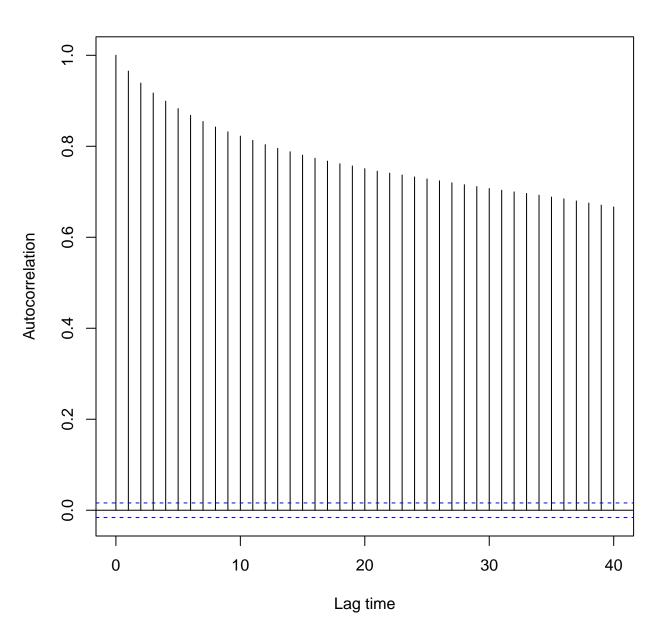
## **Mutation G GGA Mixture: 2**



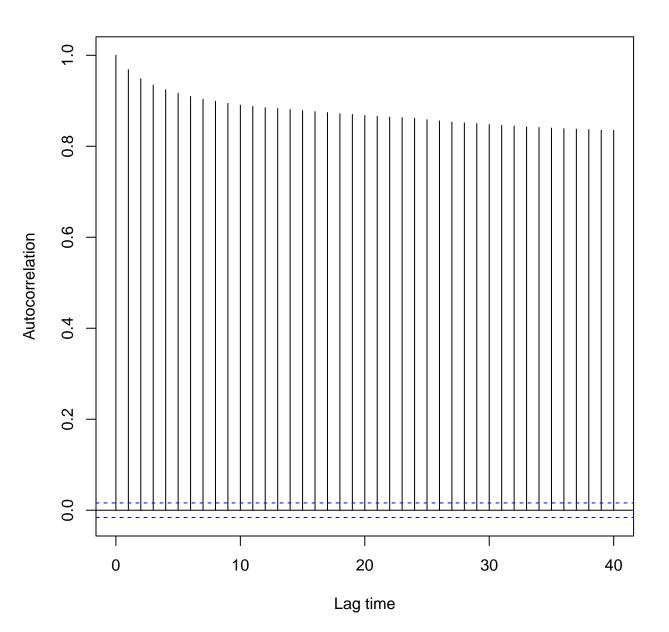
# **Mutation G GGC Mixture: 1**



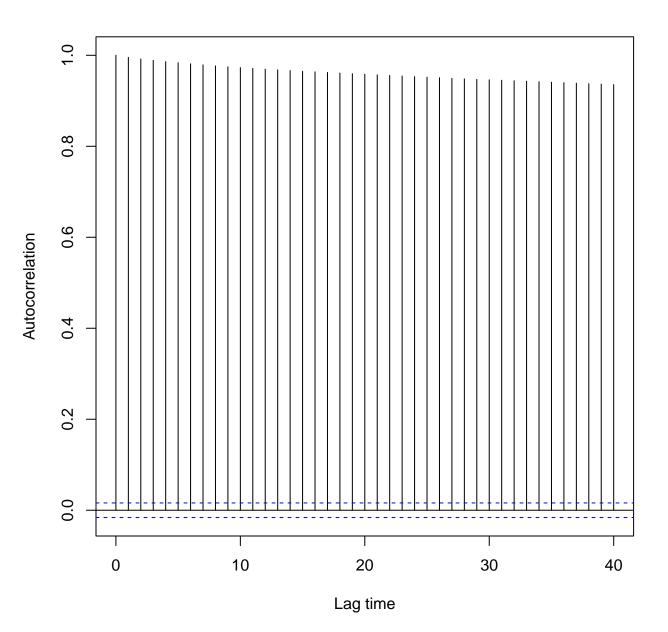
## **Mutation G GGC Mixture: 2**



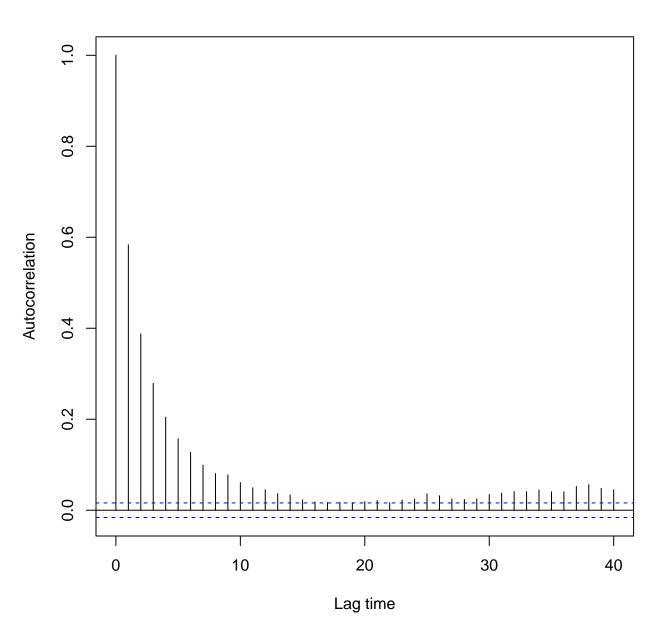
## **Mutation G GGG Mixture: 1**



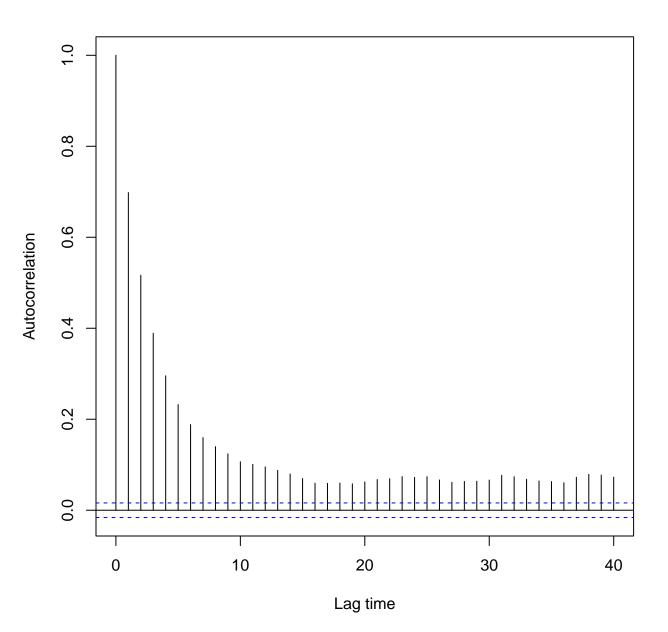
## **Mutation G GGG Mixture: 2**



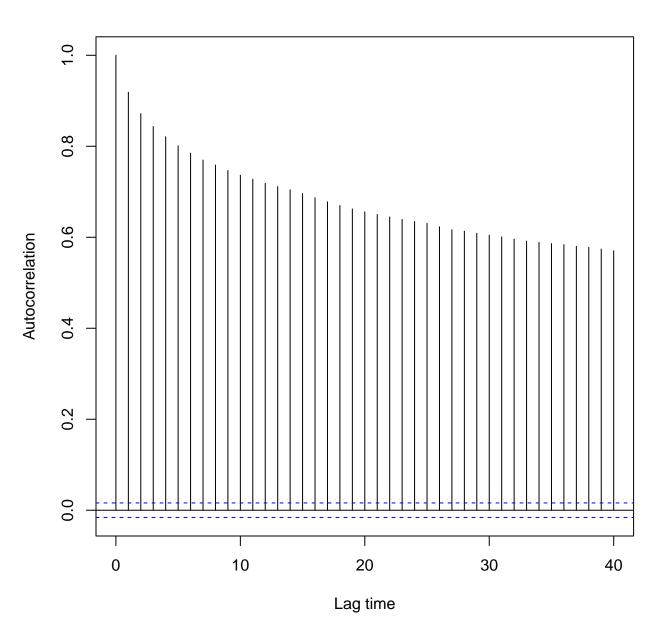
## **Mutation H CAC Mixture: 1**



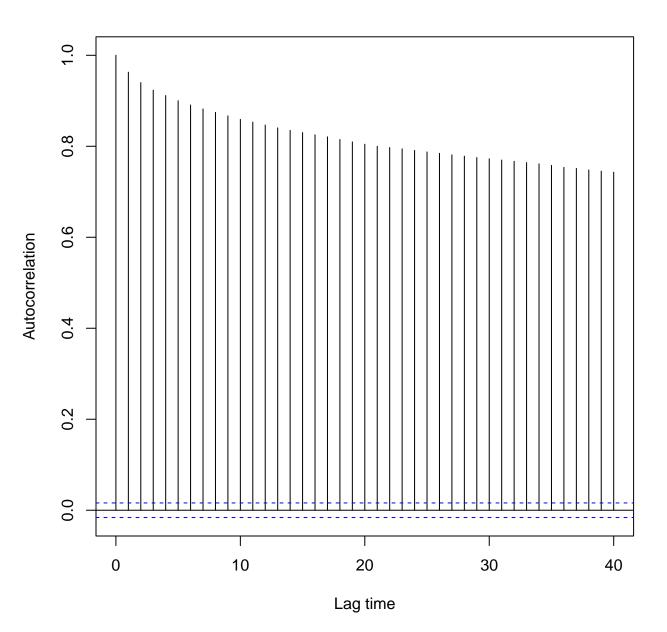
## **Mutation H CAC Mixture: 2**



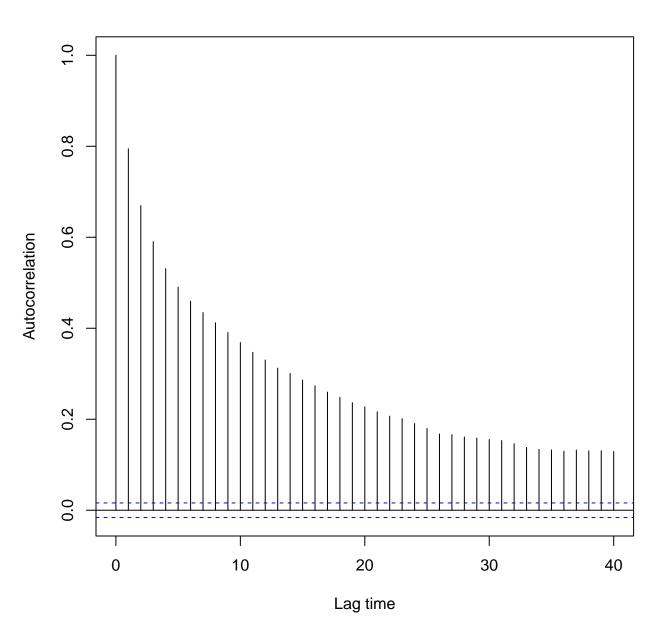
### **Mutation I ATA Mixture: 1**



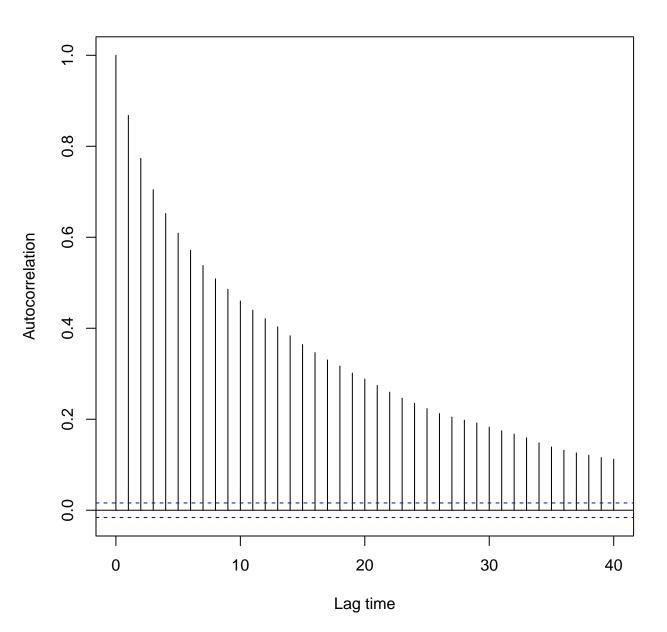
### **Mutation I ATA Mixture: 2**



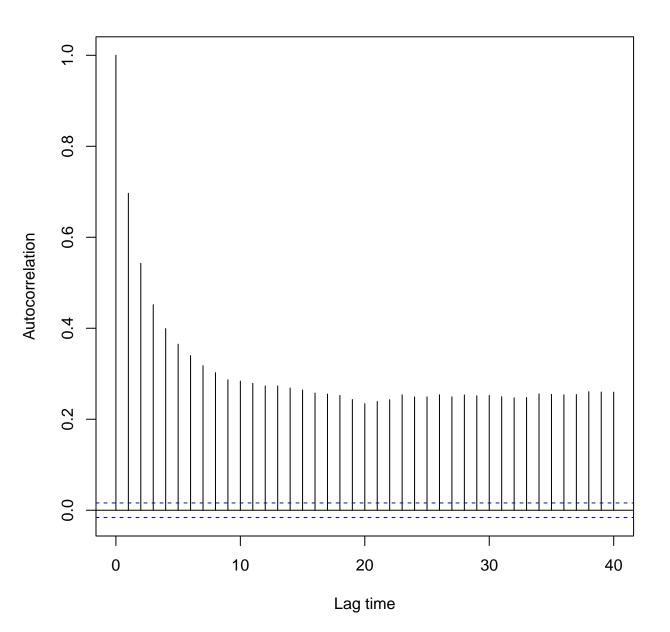
# **Mutation I ATC Mixture: 1**



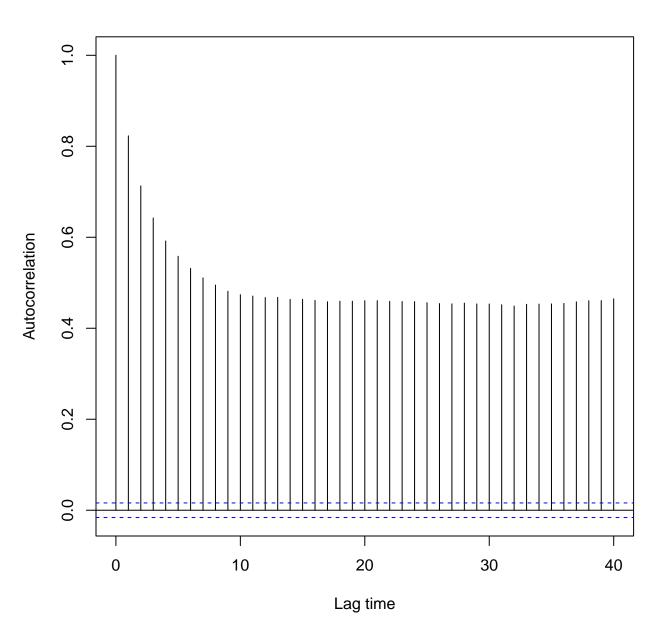
# **Mutation I ATC Mixture: 2**



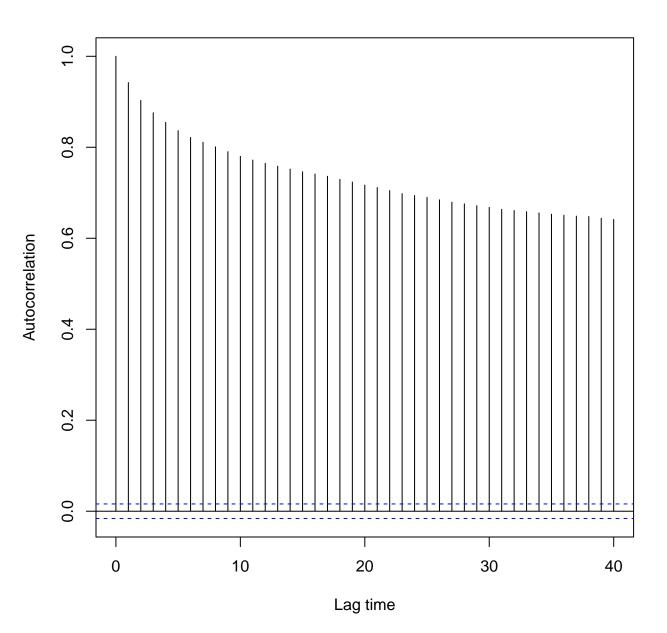
## **Mutation K AAA Mixture: 1**



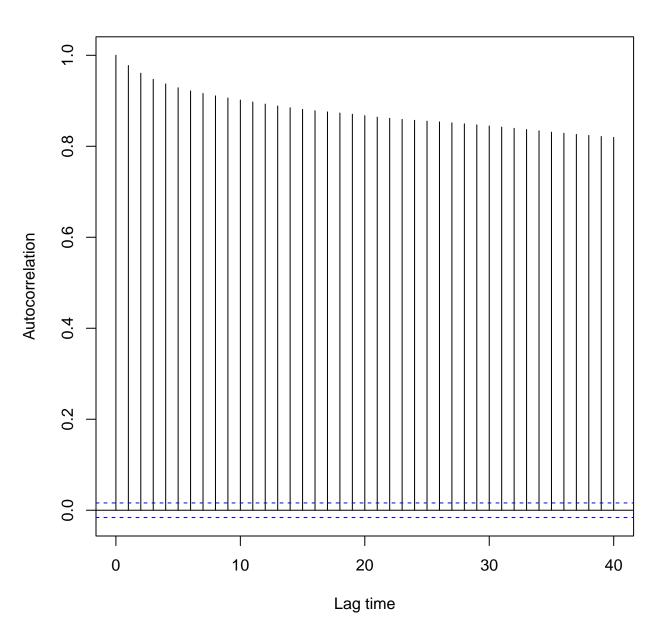
## **Mutation K AAA Mixture: 2**



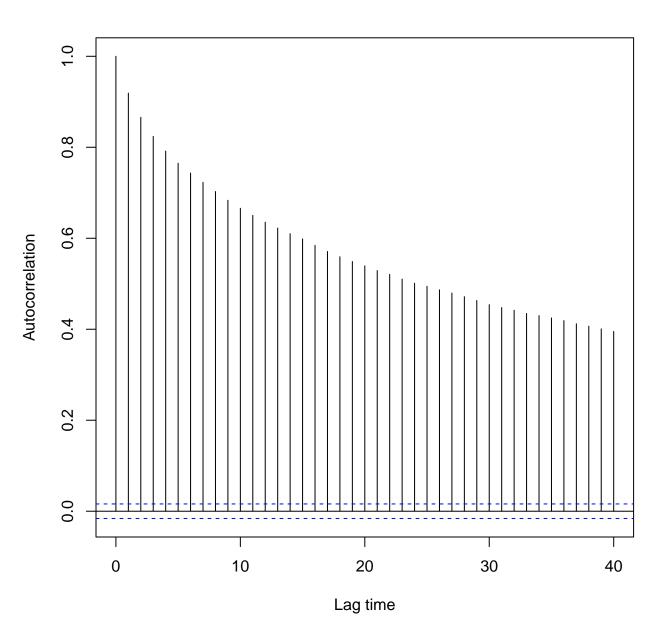
# **Mutation L CTA Mixture: 1**



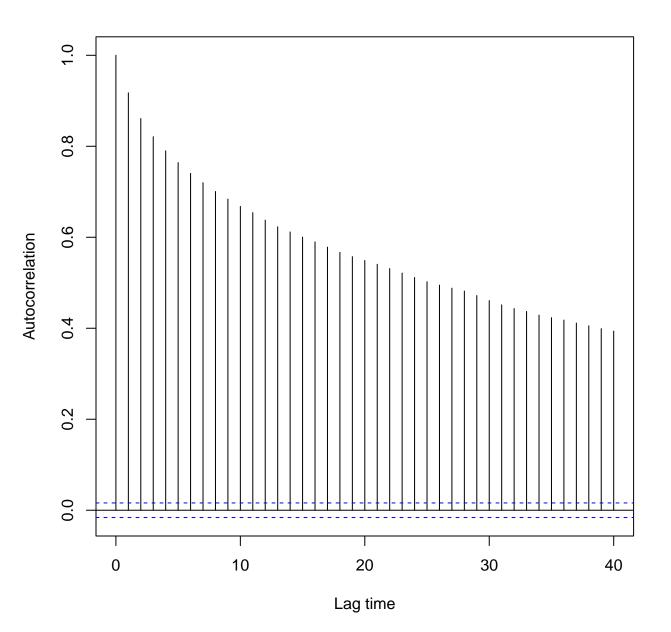
## **Mutation L CTA Mixture: 2**



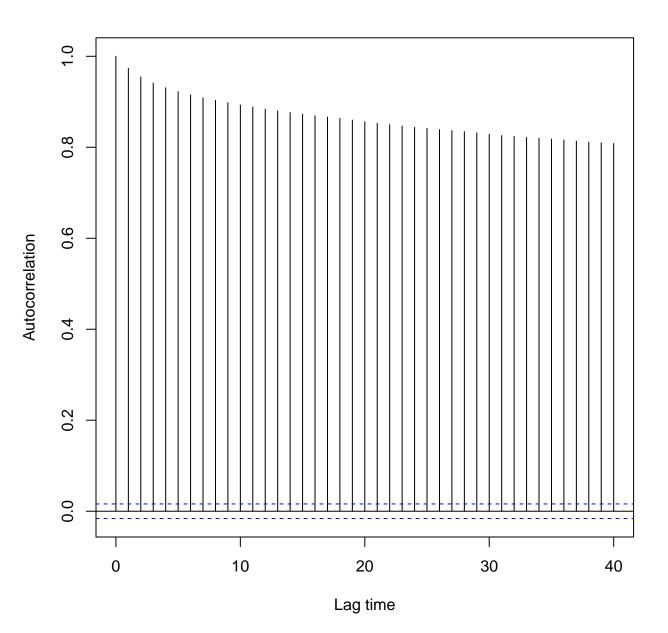
# **Mutation L CTC Mixture: 1**



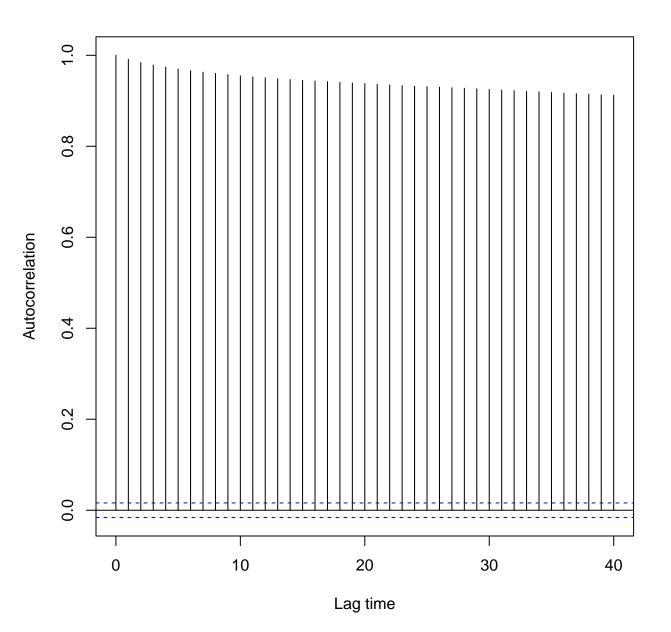
# **Mutation L CTC Mixture: 2**



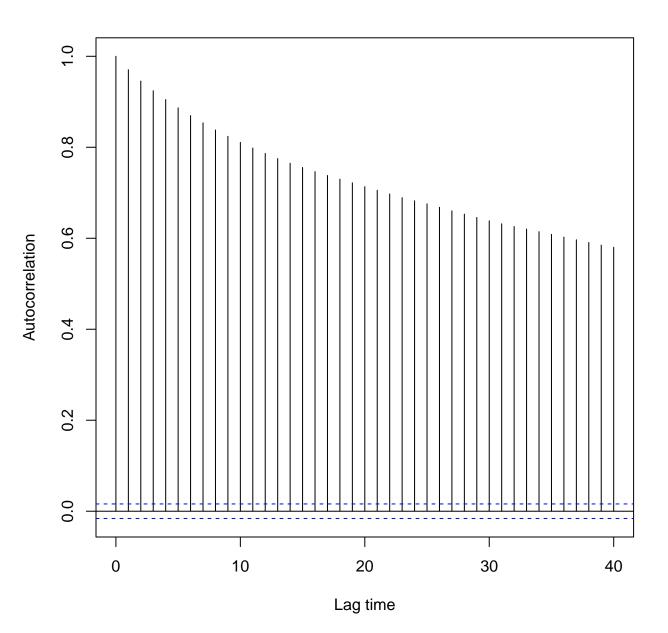
# **Mutation L CTG Mixture: 1**



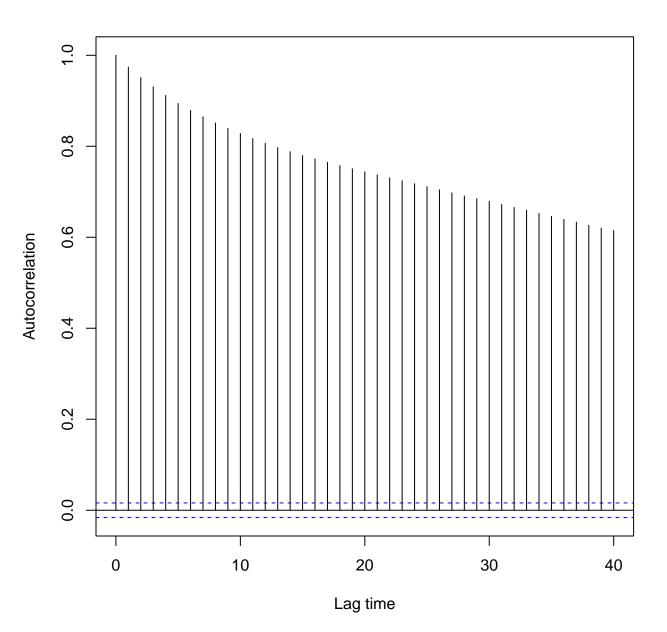
# **Mutation L CTG Mixture: 2**



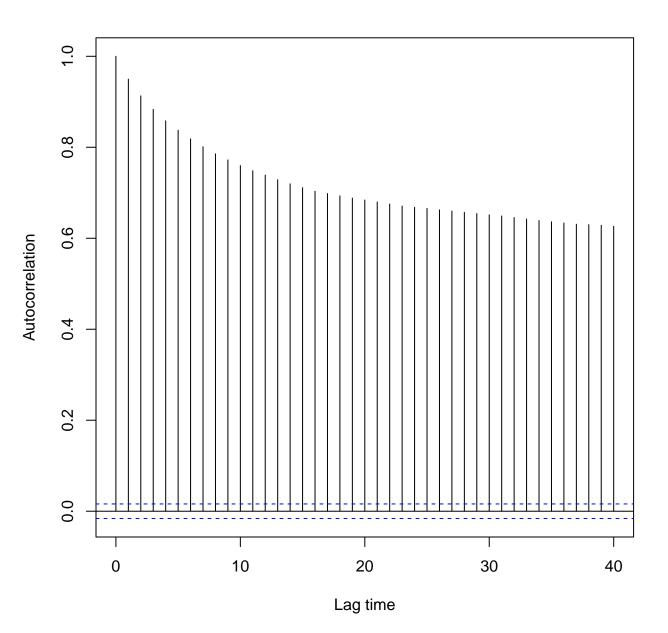
# **Mutation L CTT Mixture: 1**



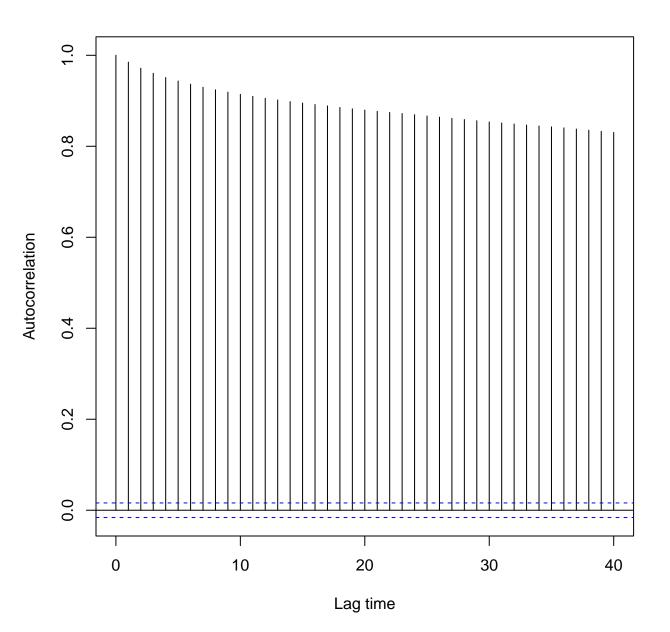
# **Mutation L CTT Mixture: 2**



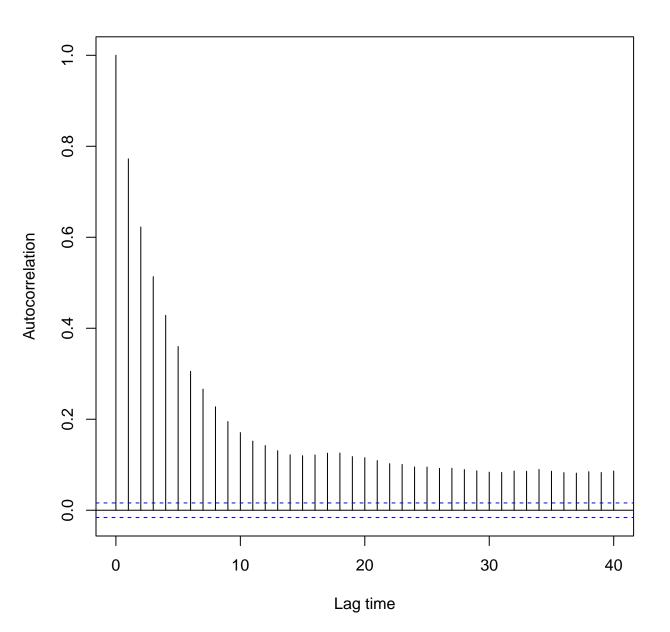
# **Mutation L TTA Mixture: 1**



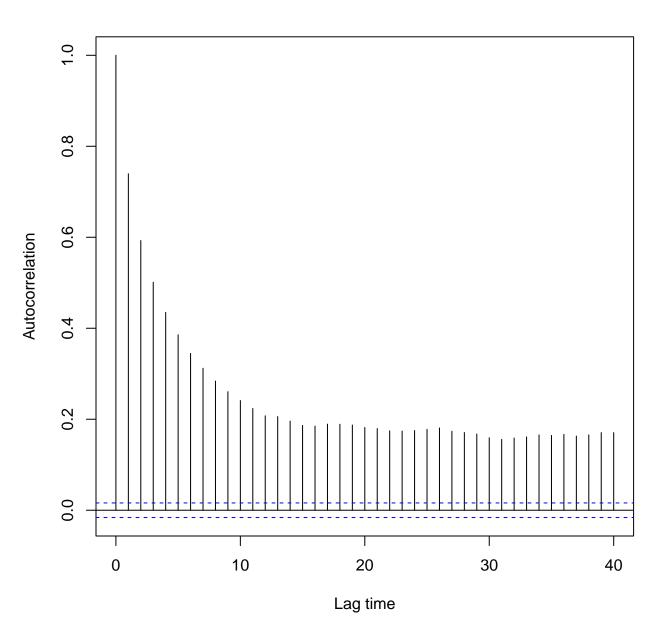
# **Mutation L TTA Mixture: 2**



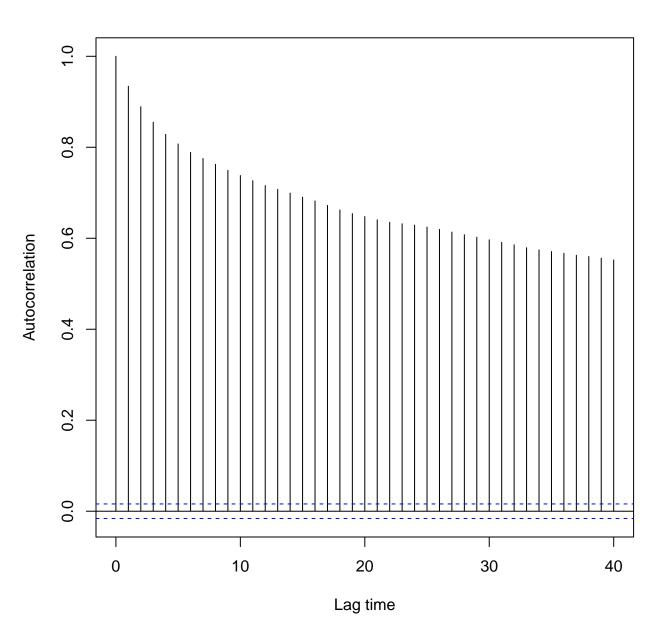
## **Mutation N AAC Mixture: 1**



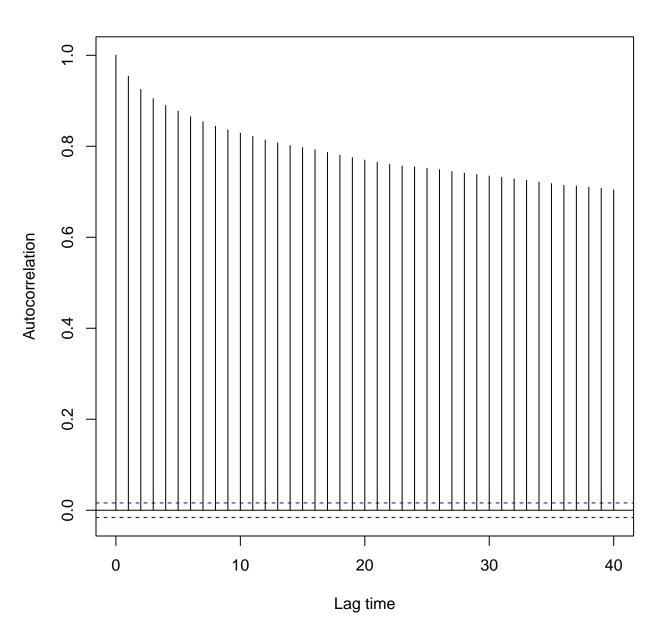
## **Mutation N AAC Mixture: 2**



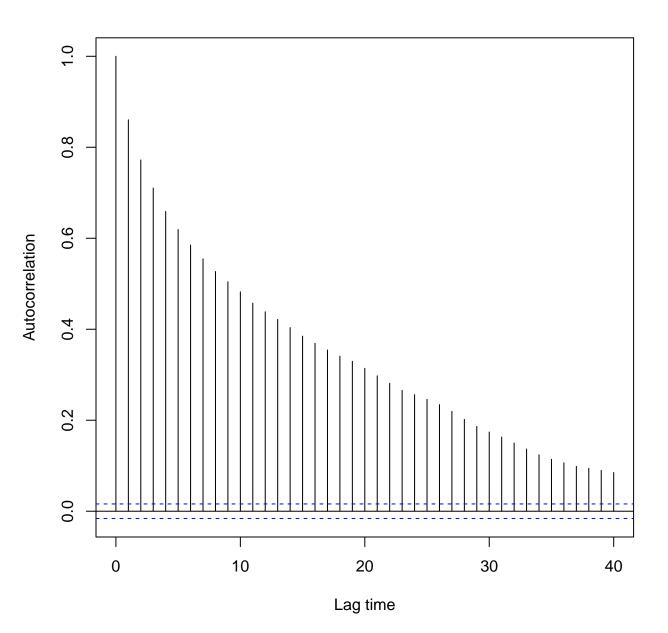
# **Mutation P CCA Mixture: 1**



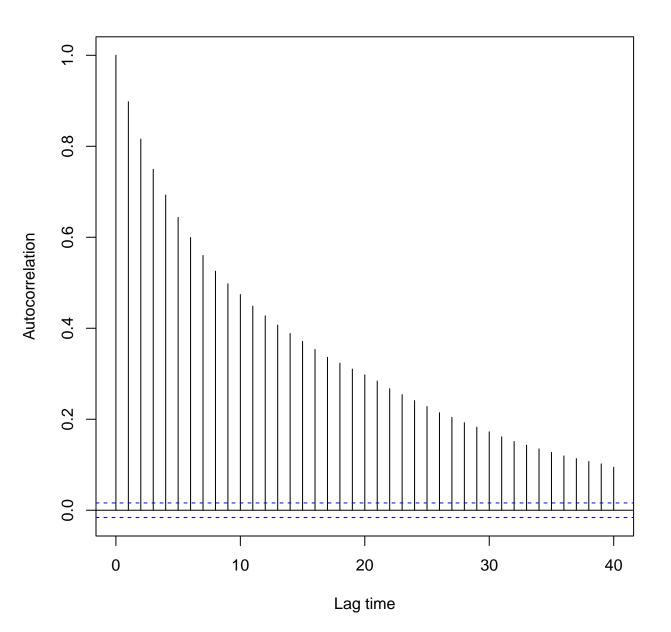
## **Mutation P CCA Mixture: 2**



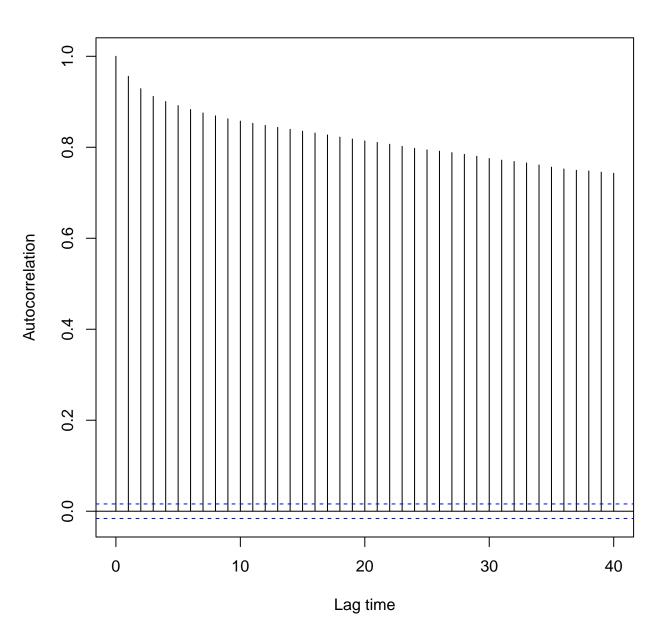
# **Mutation P CCC Mixture: 1**



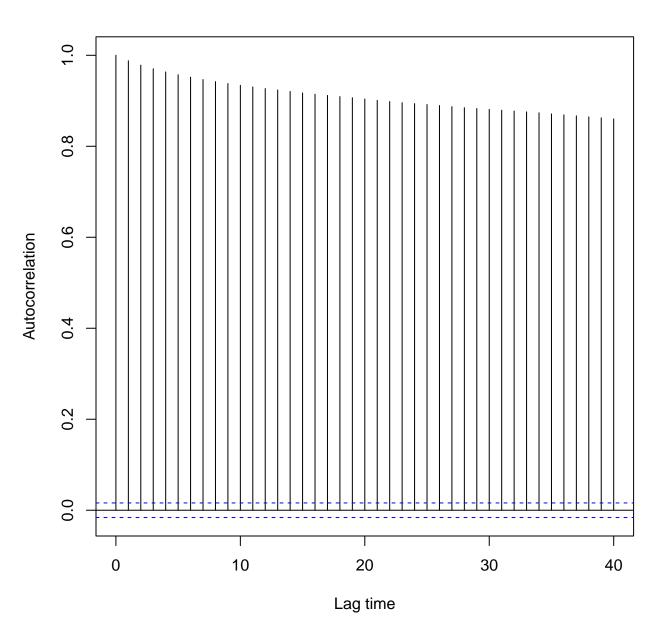
# **Mutation P CCC Mixture: 2**



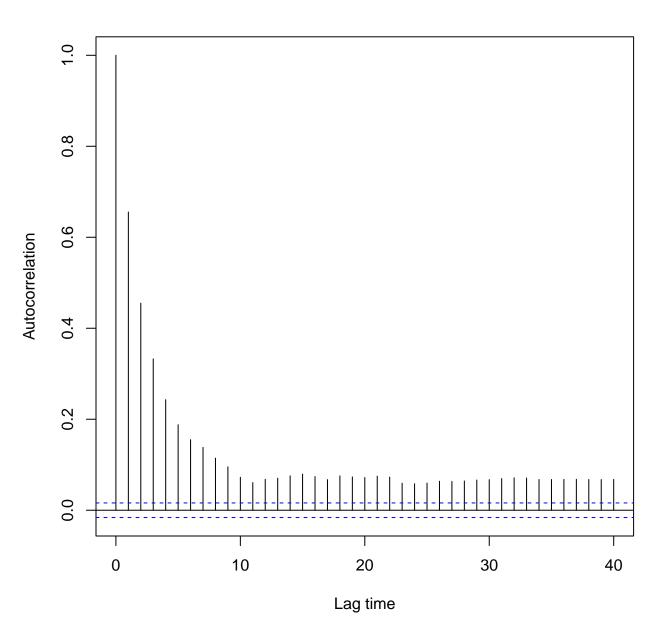
# **Mutation P CCG Mixture: 1**



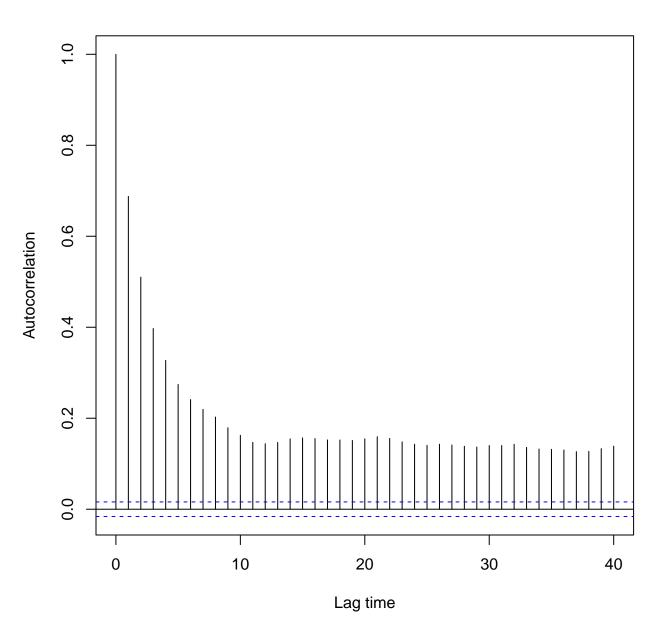
# **Mutation P CCG Mixture: 2**



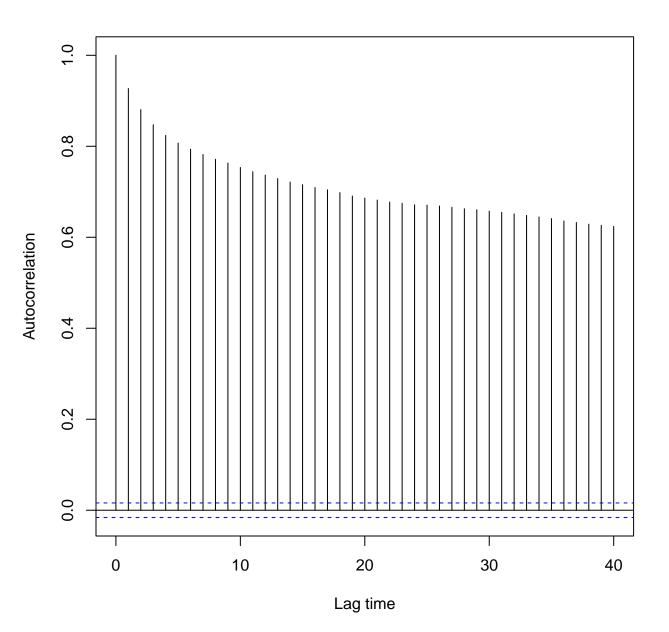
# **Mutation Q CAA Mixture: 1**



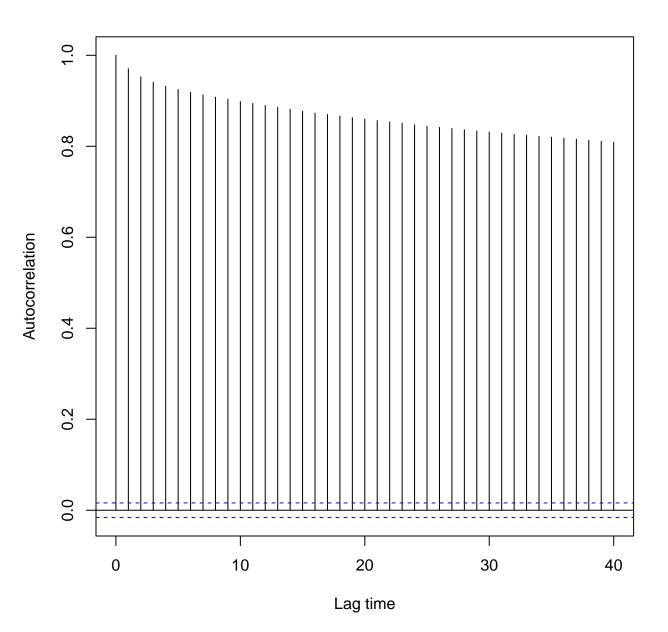
# **Mutation Q CAA Mixture: 2**



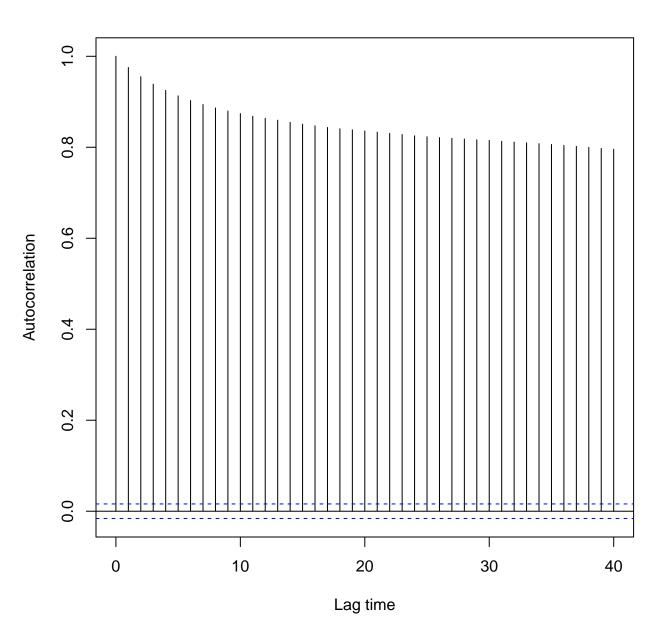
## **Mutation R AGA Mixture: 1**



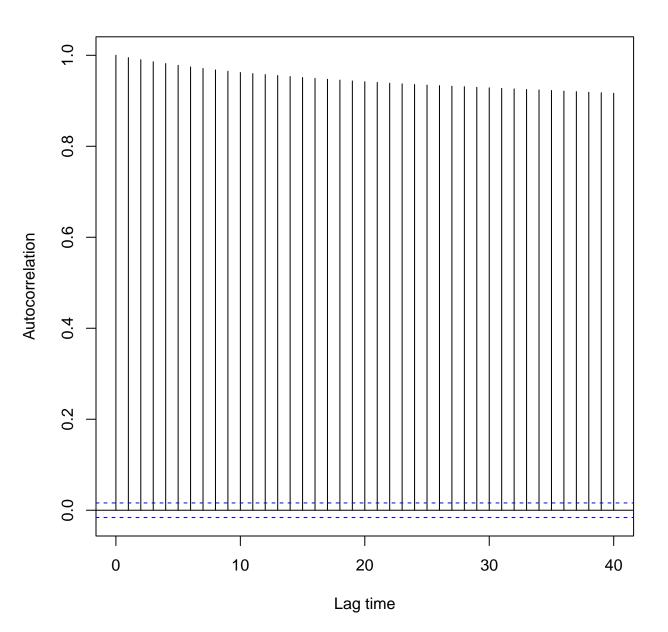
## **Mutation R AGA Mixture: 2**



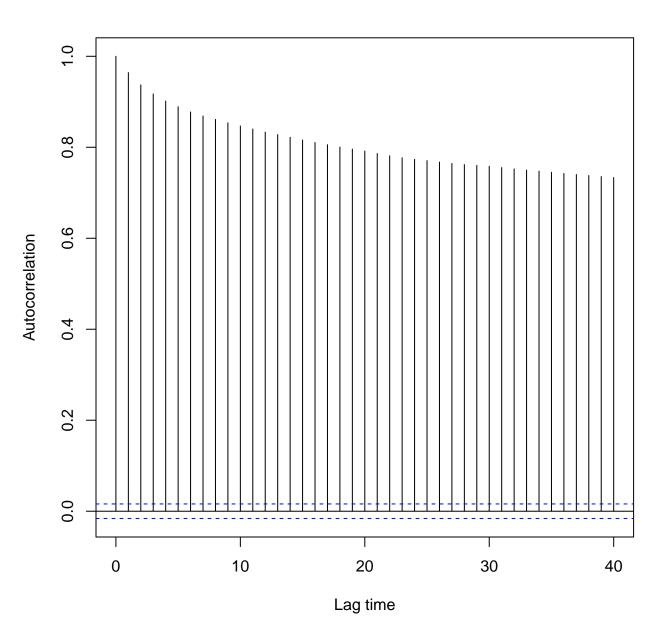
## **Mutation R AGG Mixture: 1**



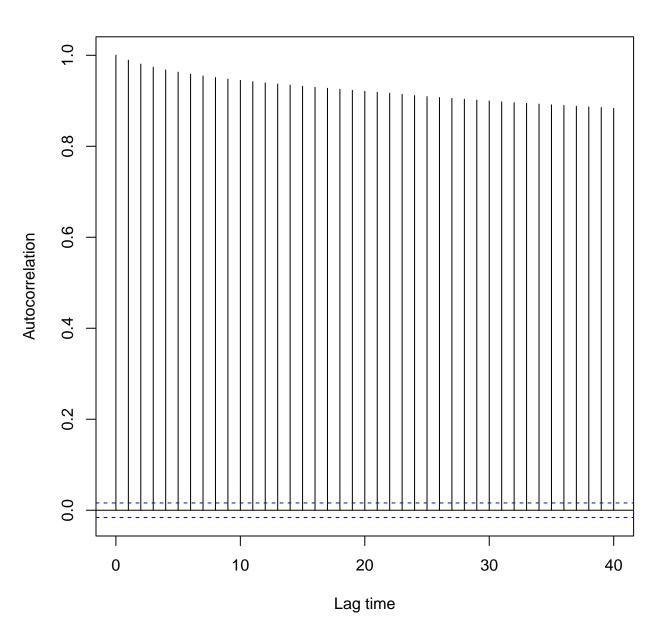
## **Mutation R AGG Mixture: 2**



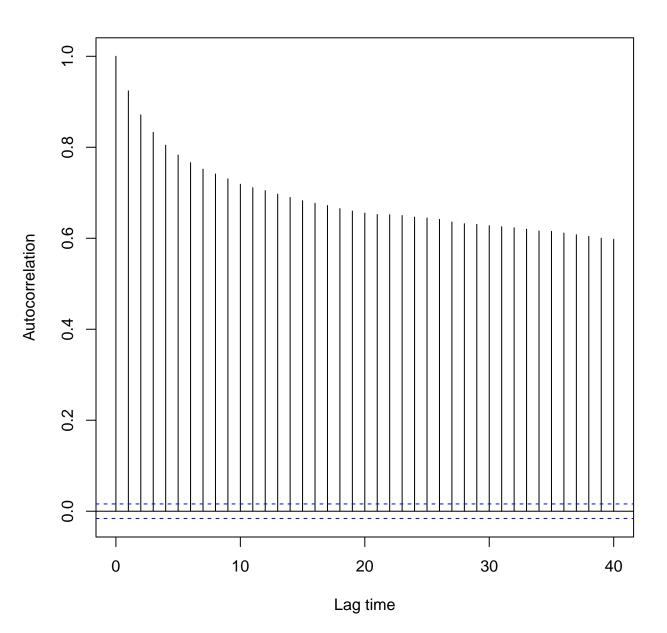
# **Mutation R CGA Mixture: 1**



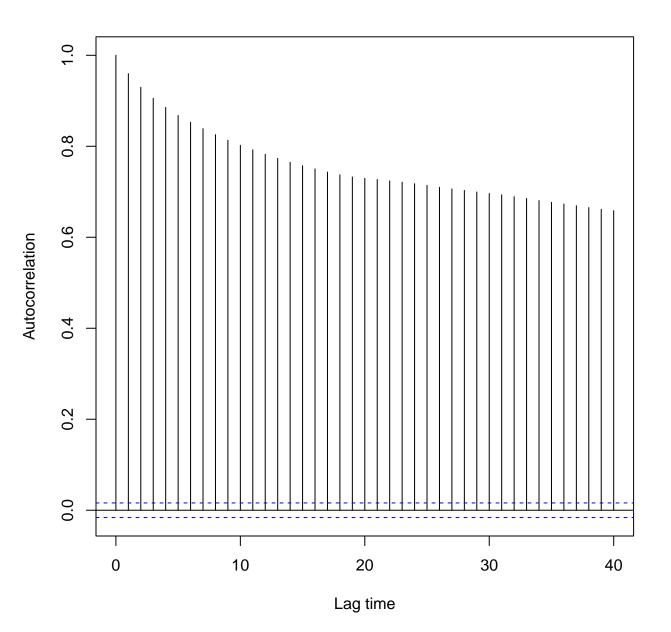
# **Mutation R CGA Mixture: 2**



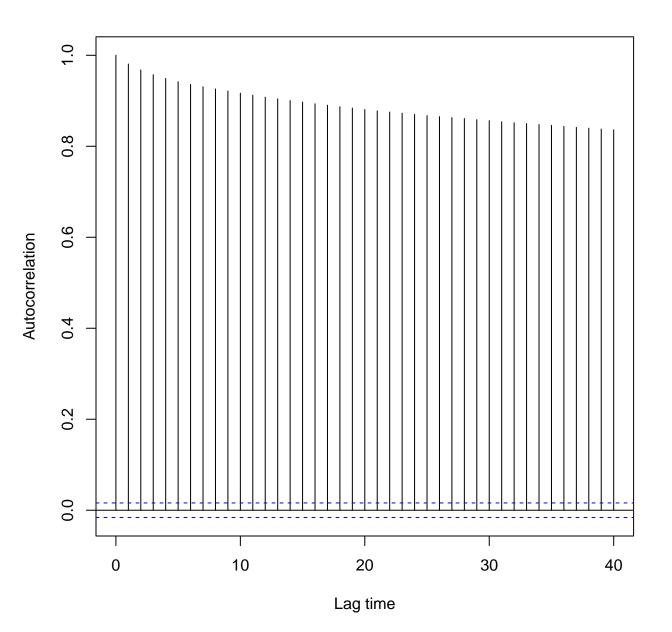
# **Mutation R CGC Mixture: 1**



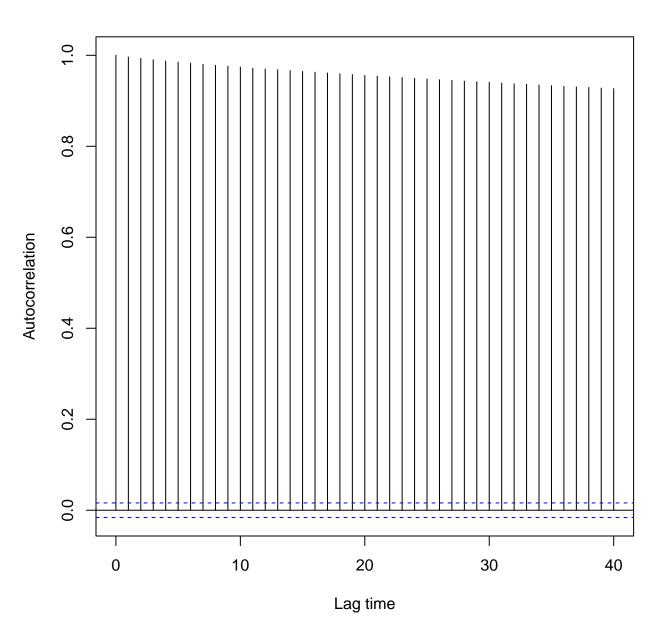
# **Mutation R CGC Mixture: 2**



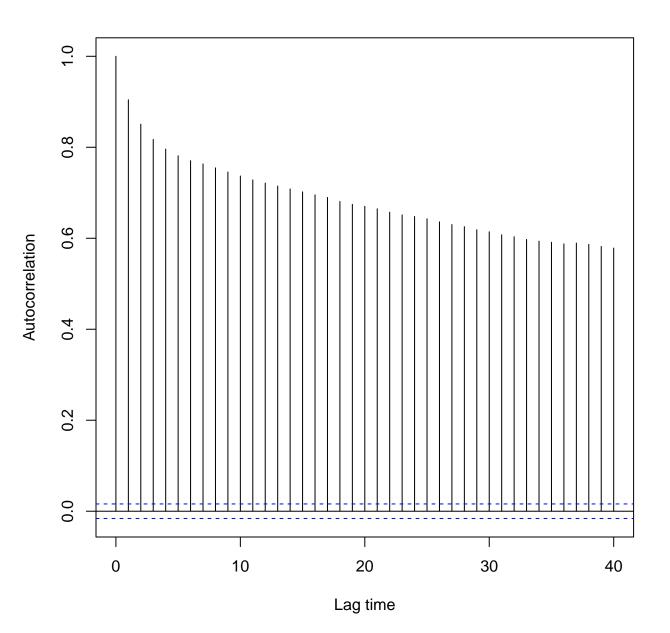
# **Mutation R CGG Mixture: 1**



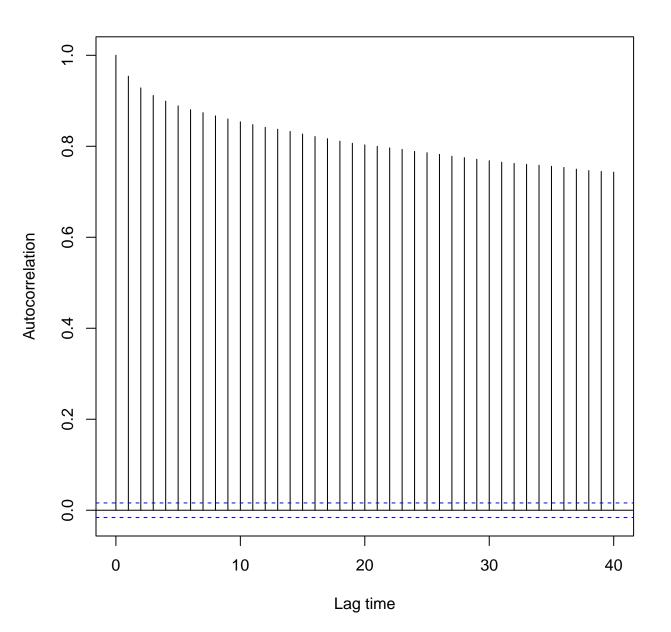
## **Mutation R CGG Mixture: 2**



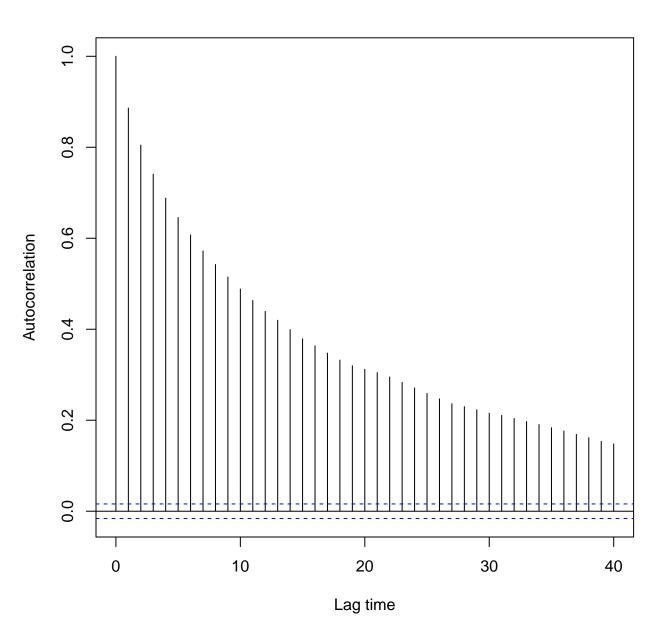
# **Mutation S TCA Mixture: 1**



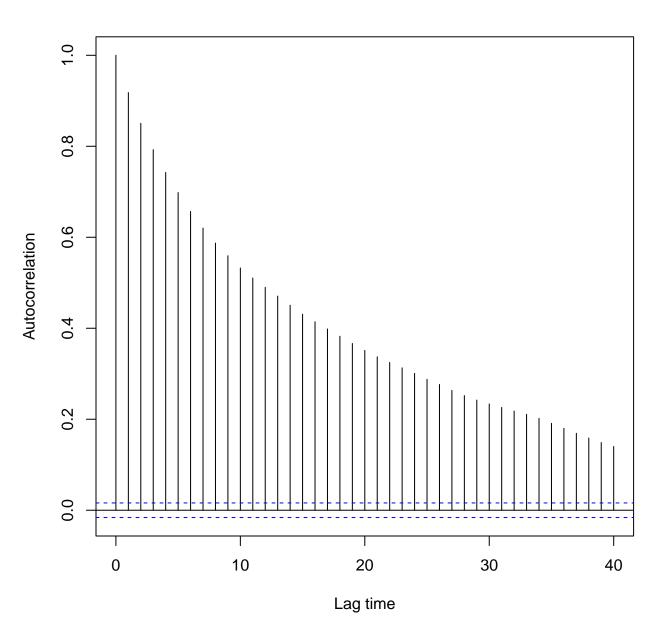
# **Mutation S TCA Mixture: 2**



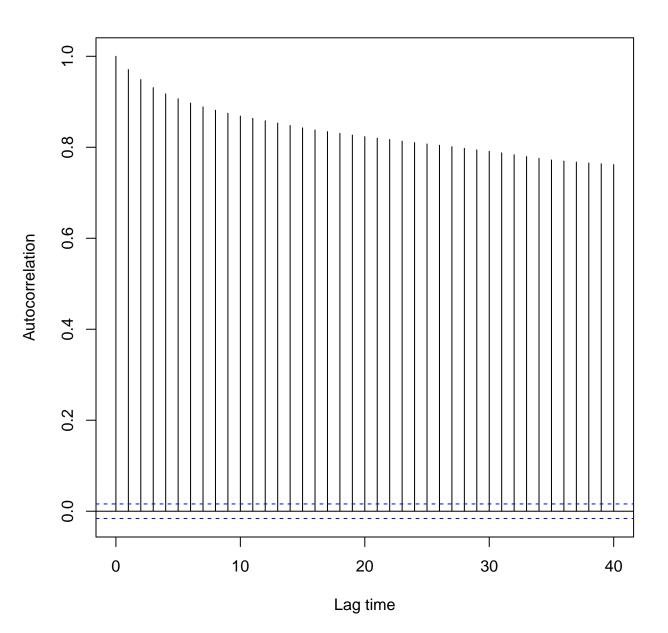
# **Mutation S TCC Mixture: 1**



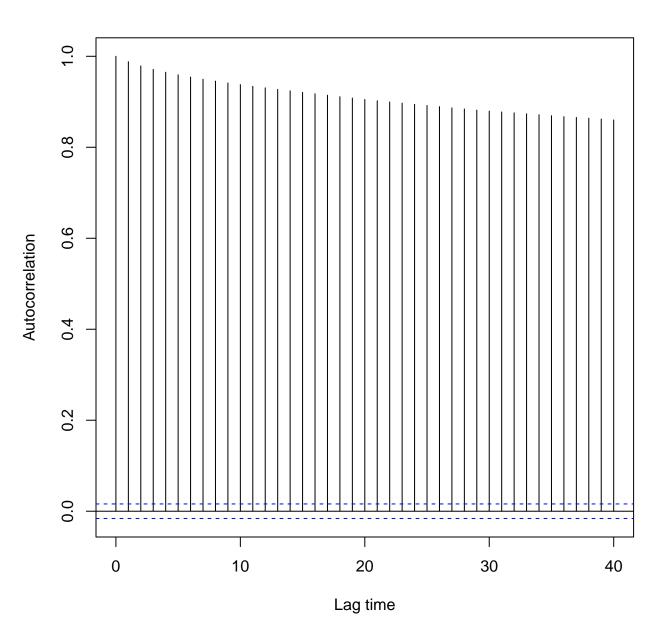
# **Mutation S TCC Mixture: 2**



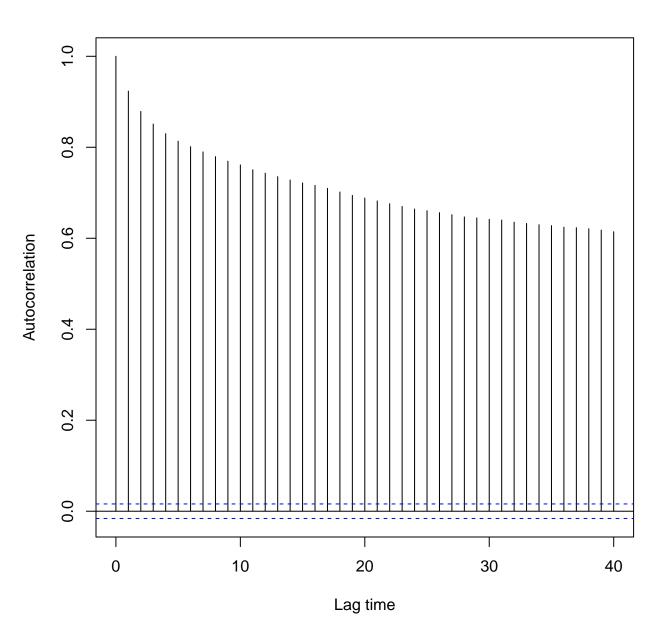
# **Mutation S TCG Mixture: 1**



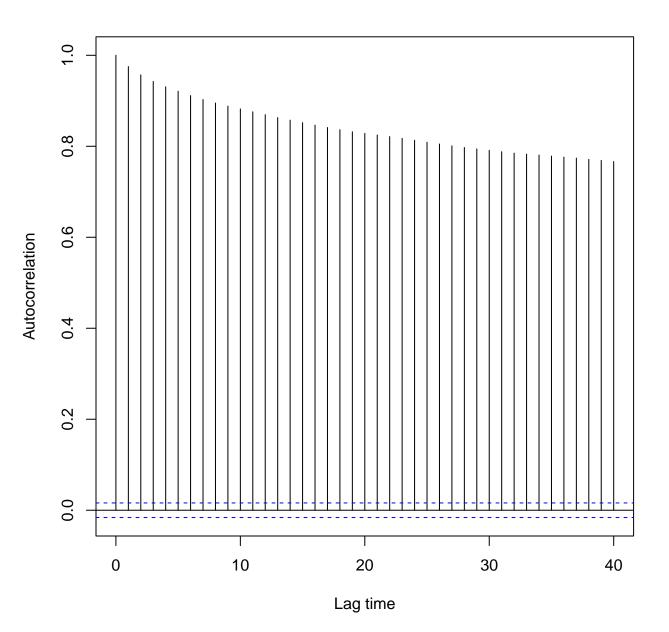
# **Mutation S TCG Mixture: 2**



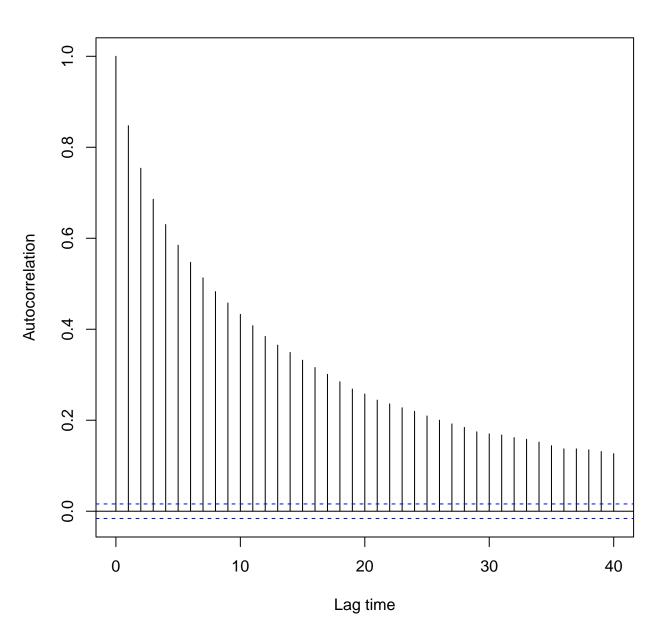
### **Mutation T ACA Mixture: 1**



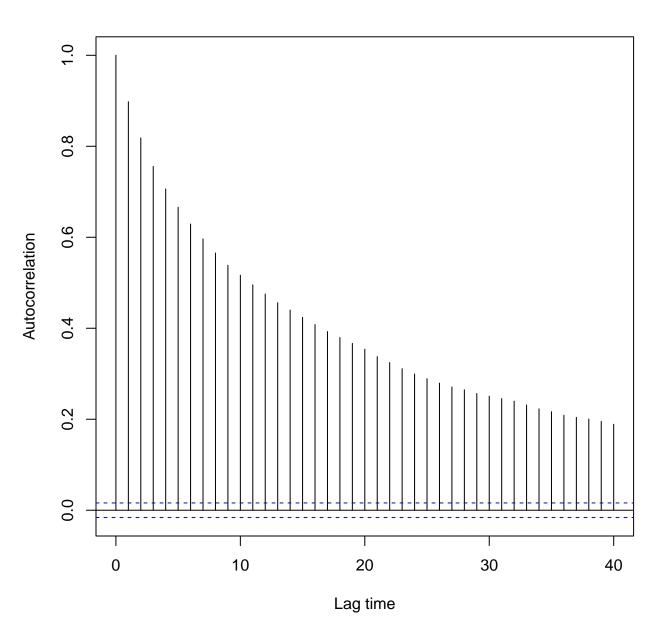
### **Mutation T ACA Mixture: 2**



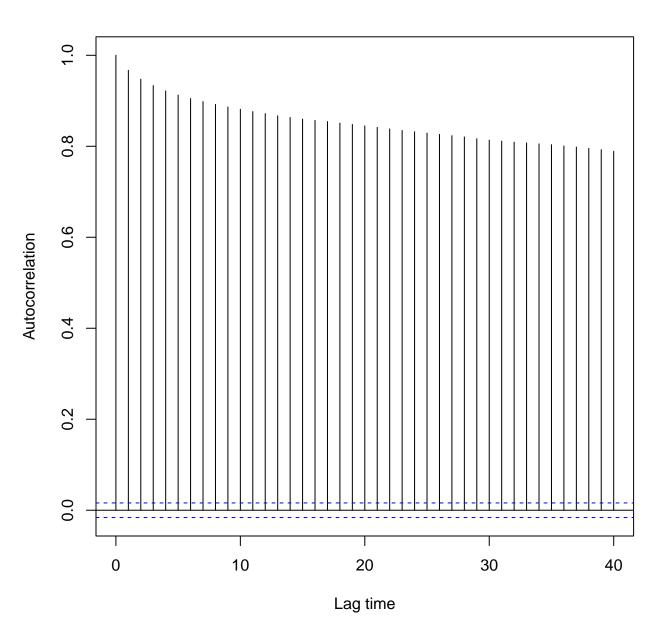
# **Mutation T ACC Mixture: 1**



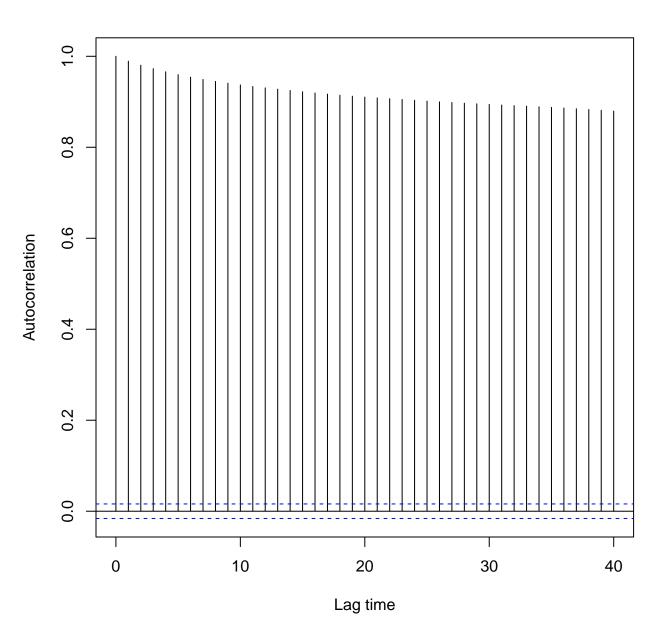
# **Mutation T ACC Mixture: 2**



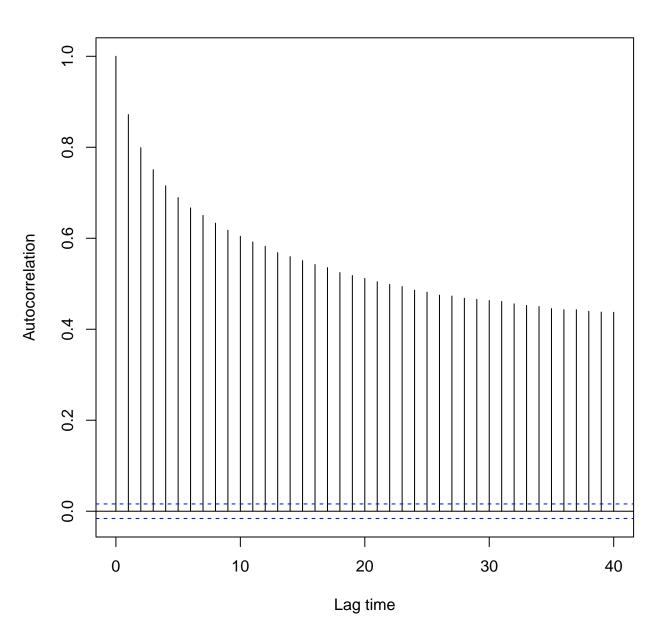
### **Mutation T ACG Mixture: 1**



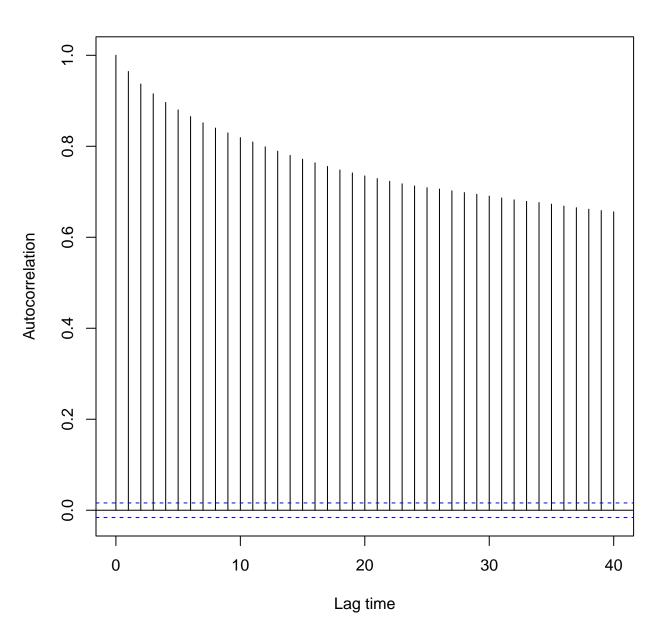
### **Mutation T ACG Mixture: 2**



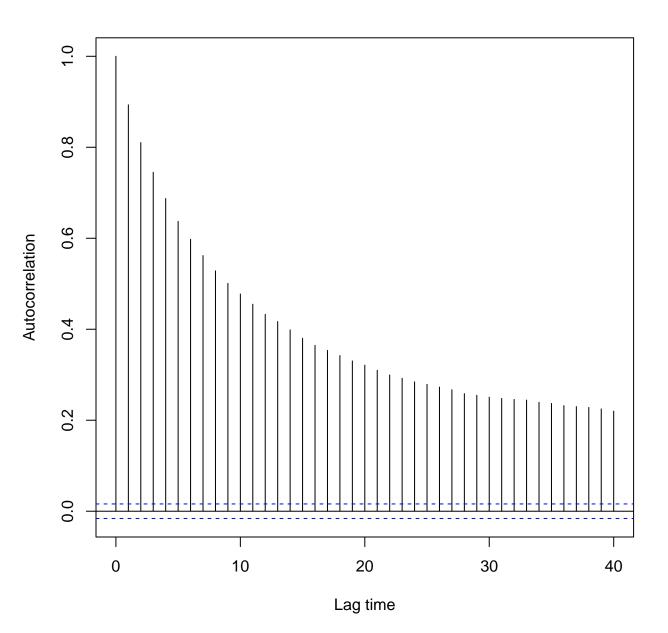
### **Mutation V GTA Mixture: 1**



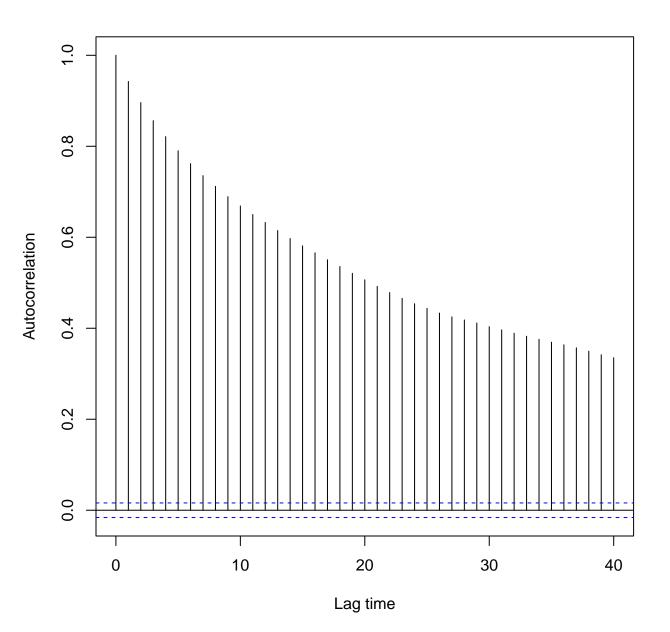
### **Mutation V GTA Mixture: 2**



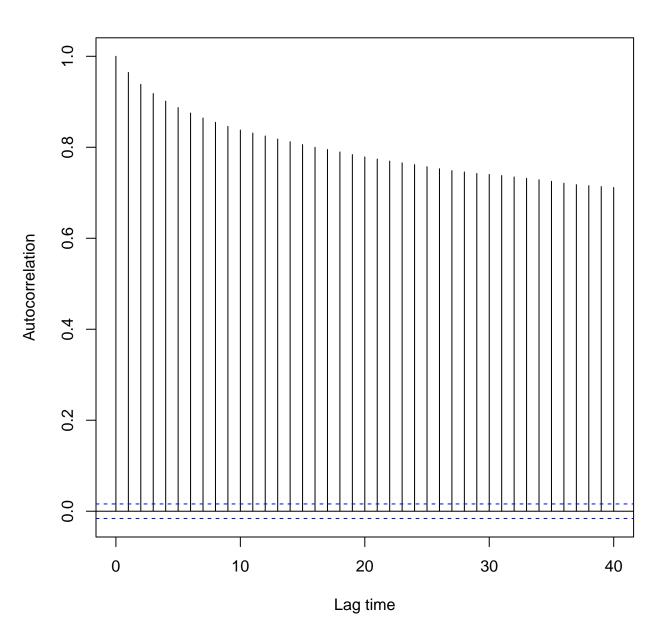
# **Mutation V GTC Mixture: 1**



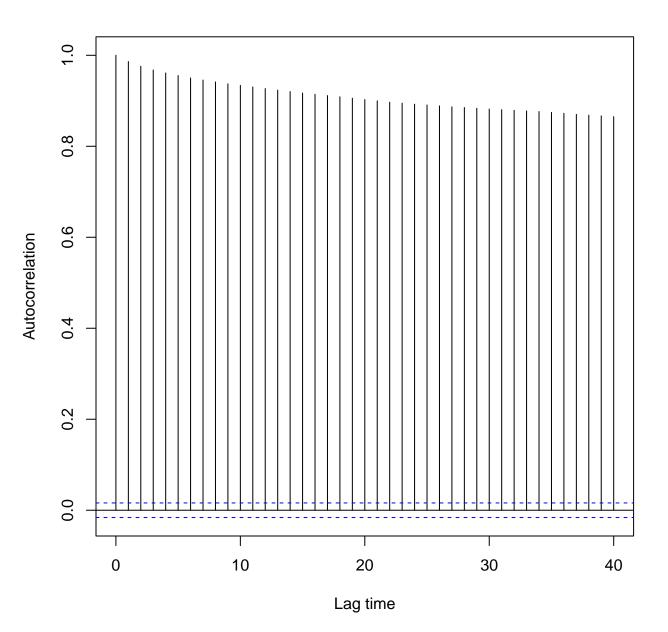
### **Mutation V GTC Mixture: 2**



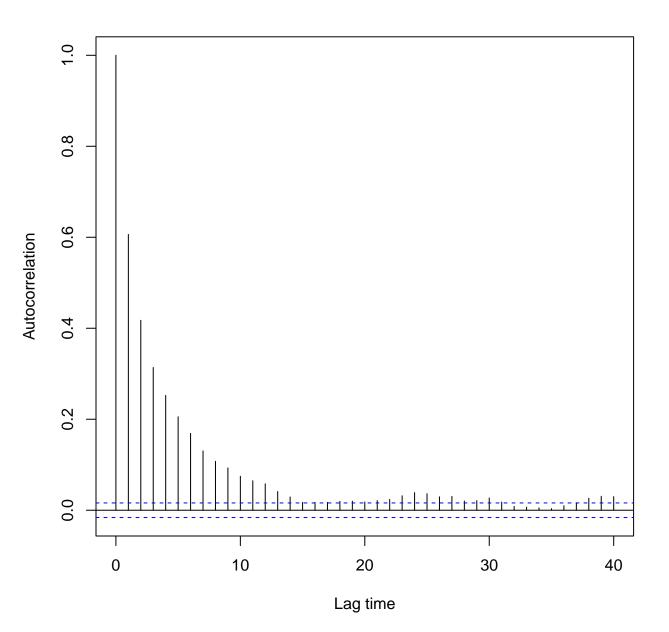
# **Mutation V GTG Mixture: 1**



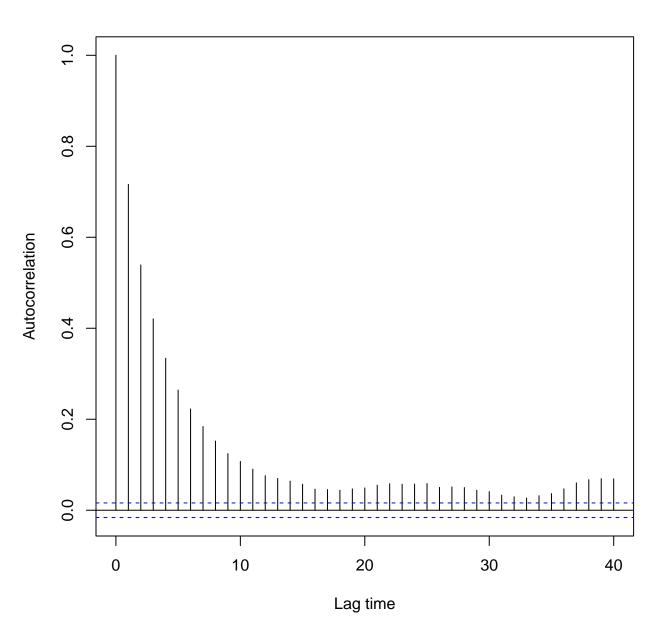
# **Mutation V GTG Mixture: 2**



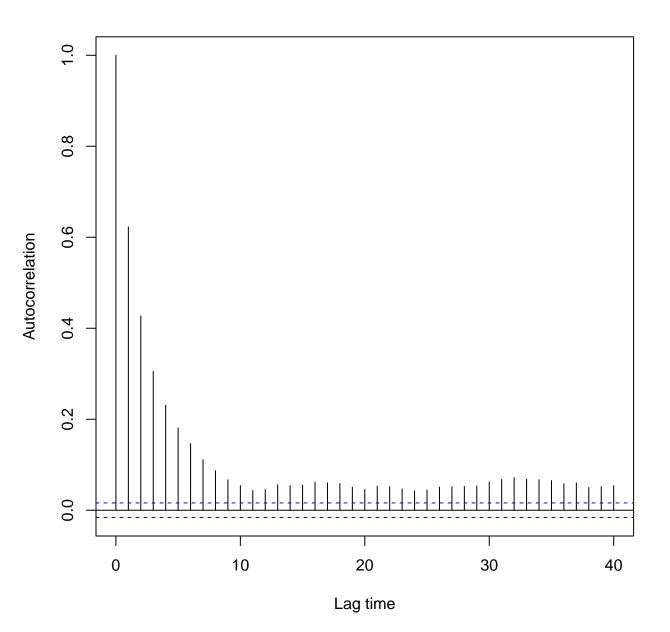
### **Mutation Y TAC Mixture: 1**



# **Mutation Y TAC Mixture: 2**



### **Mutation Z AGC Mixture: 1**



### **Mutation Z AGC Mixture: 2**

