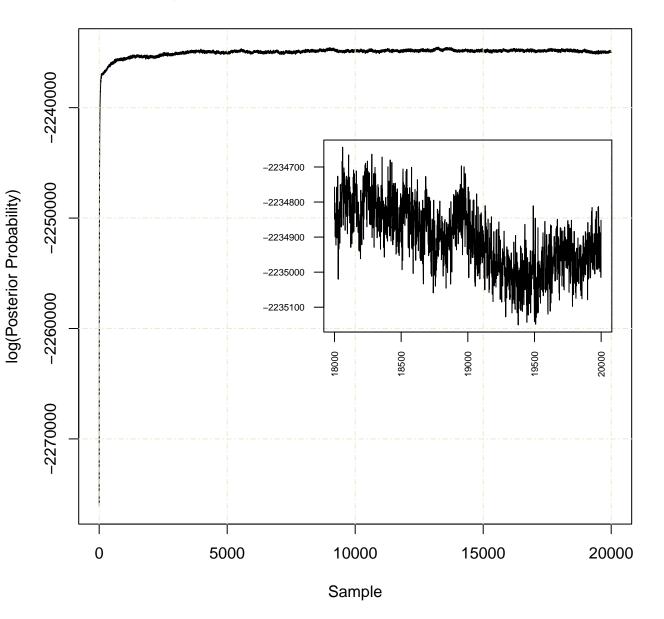
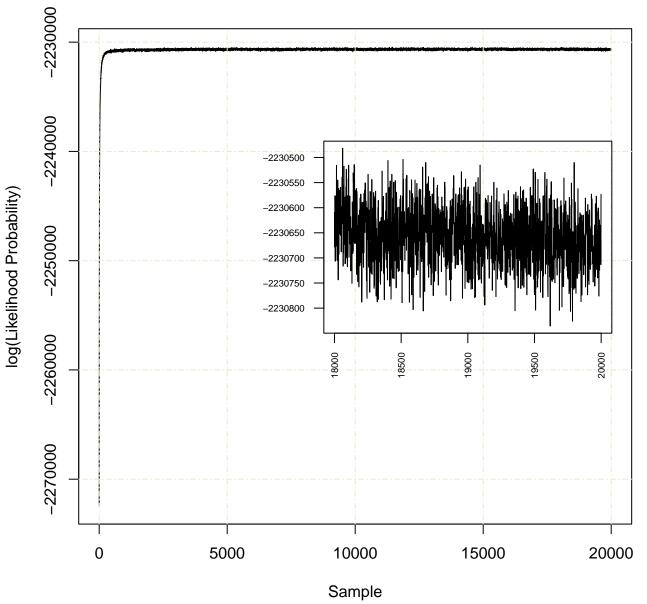
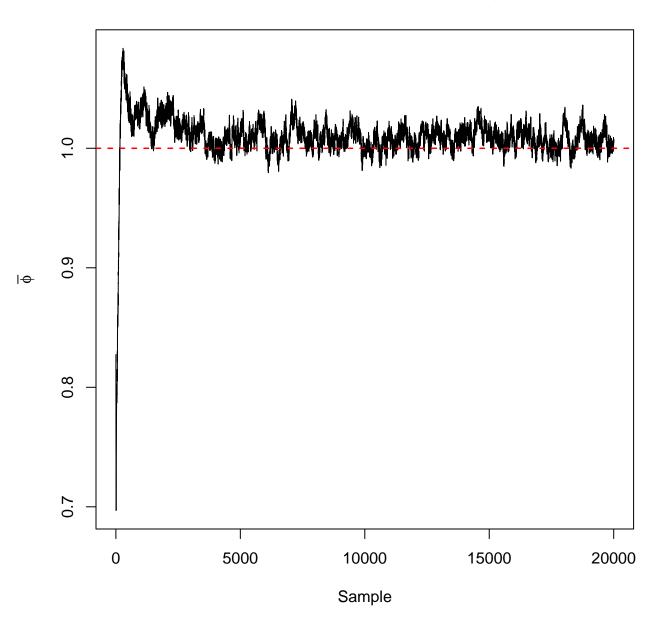
### log(Posterior Probability): -2234905.03088111



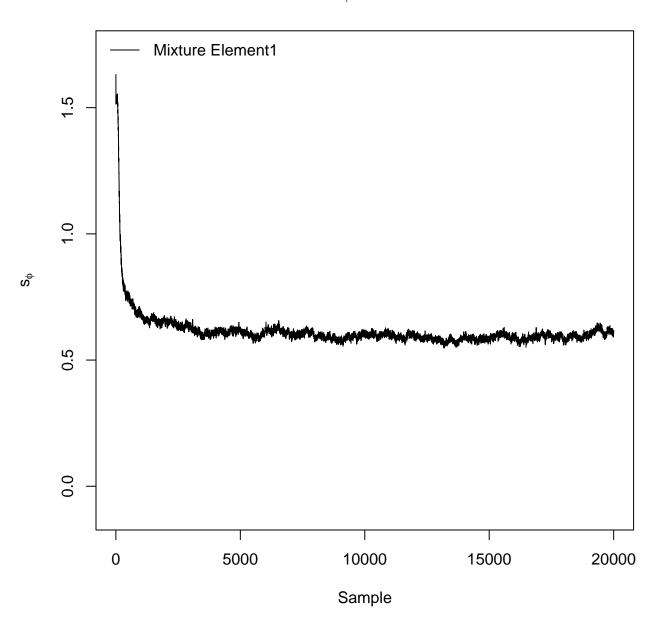
### log(Likelihood Probability): -2230655.59664519



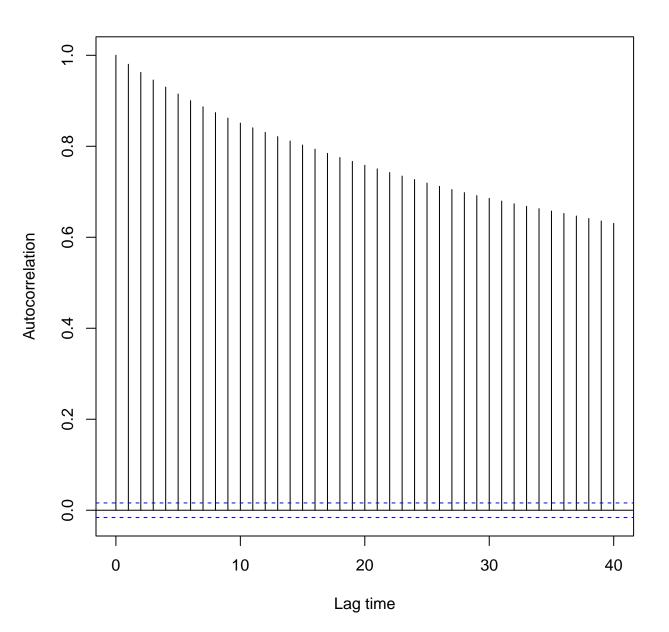
# Trace of the Expected value of $\,\phi$



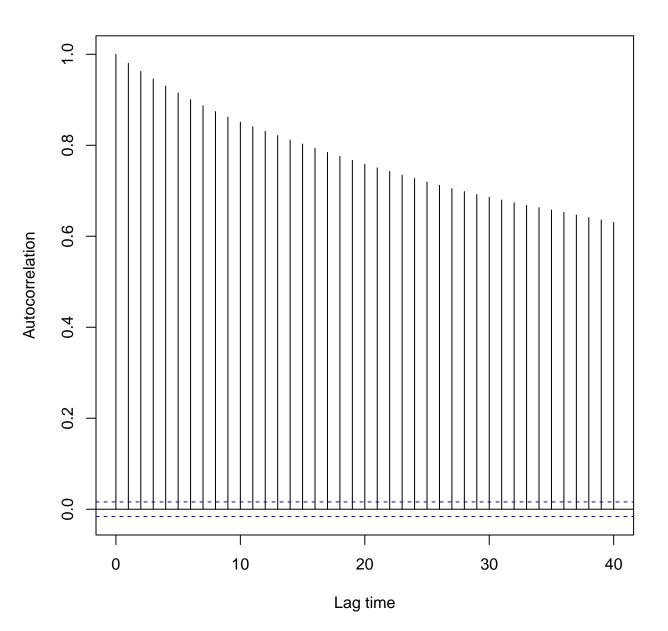
 $s_{\boldsymbol{\varphi}} Trace$ 



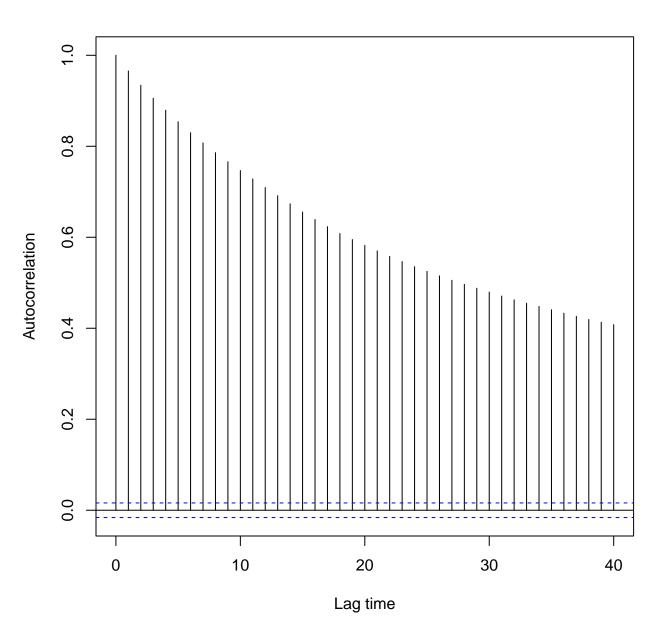
## **Selection A GCA Mixture: 1**



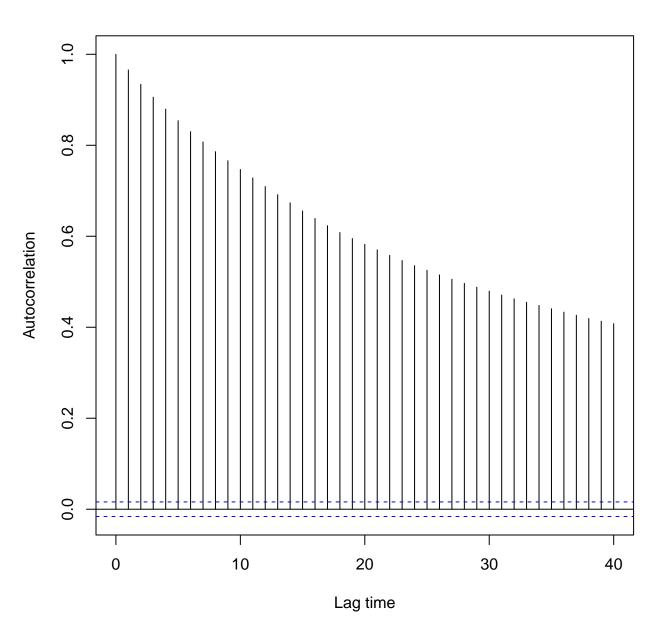
## **Selection A GCA Mixture: 2**



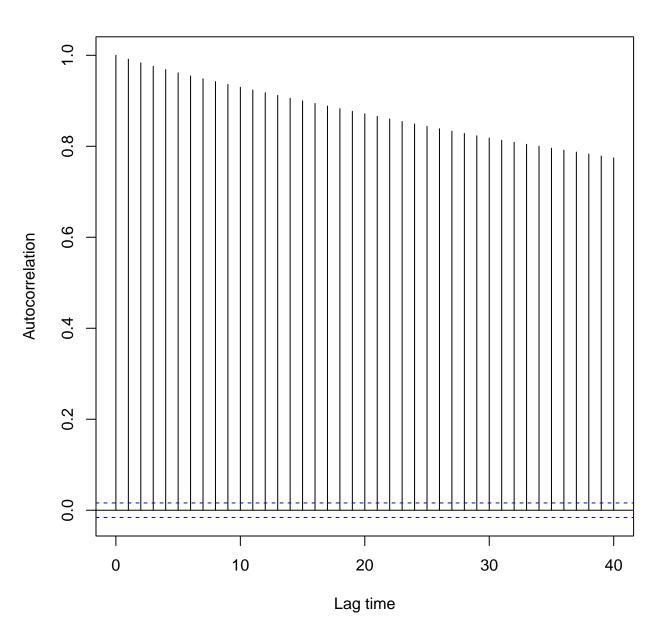
# **Selection A GCC Mixture: 1**



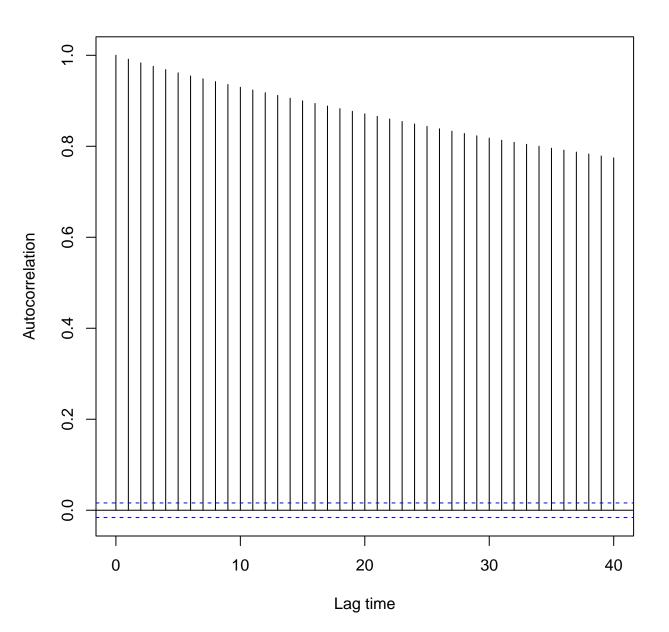
# **Selection A GCC Mixture: 2**



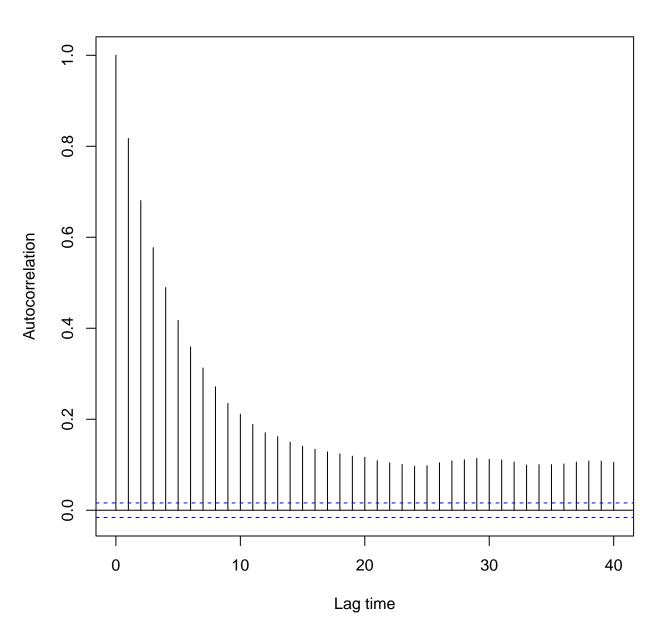
#### **Selection A GCG Mixture: 1**



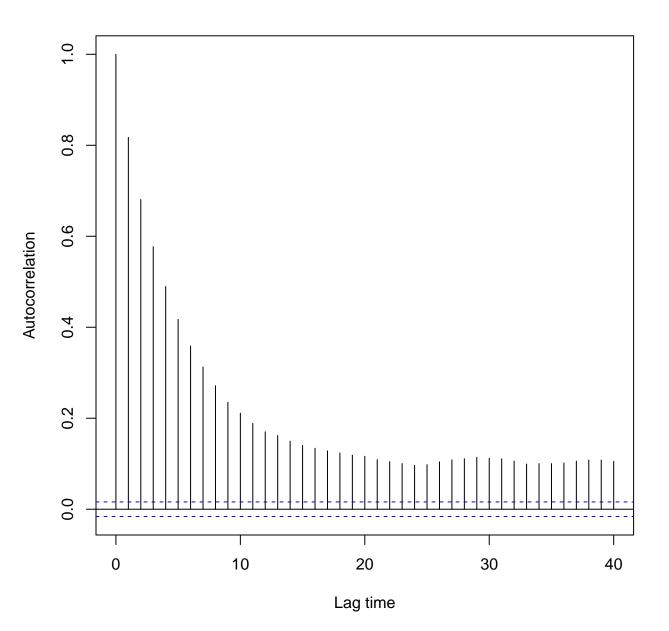
## **Selection A GCG Mixture: 2**



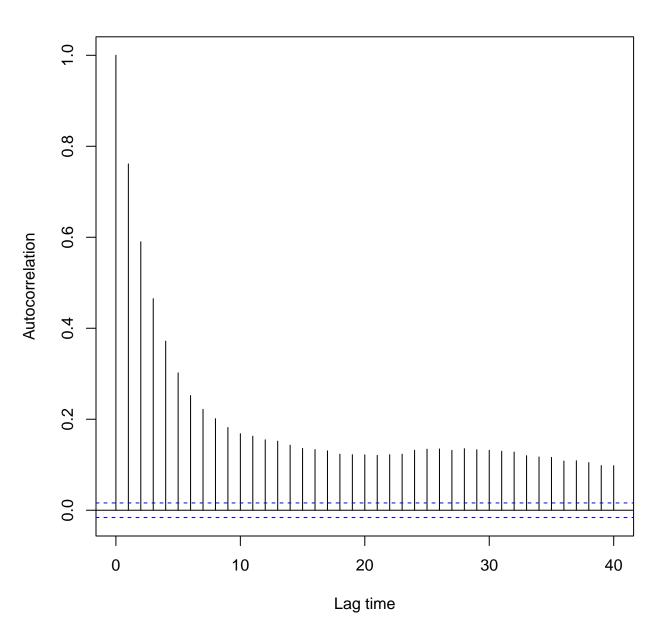
# **Selection C TGC Mixture: 1**



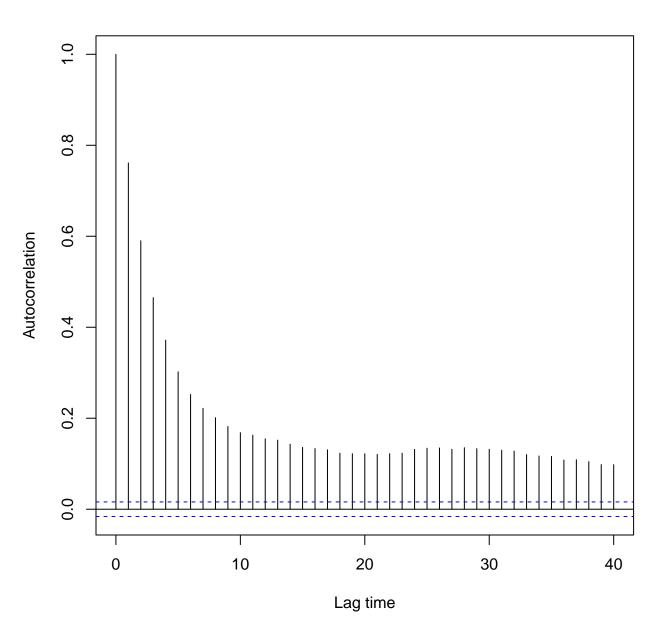
# **Selection C TGC Mixture: 2**



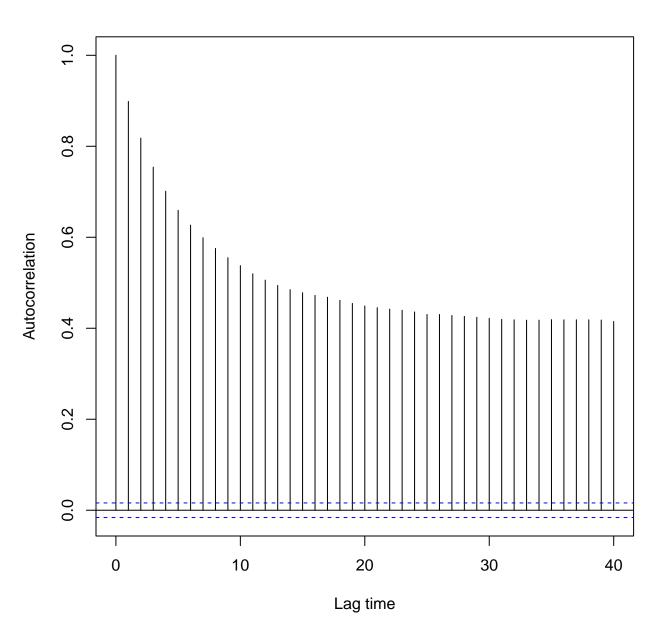
## **Selection D GAC Mixture: 1**



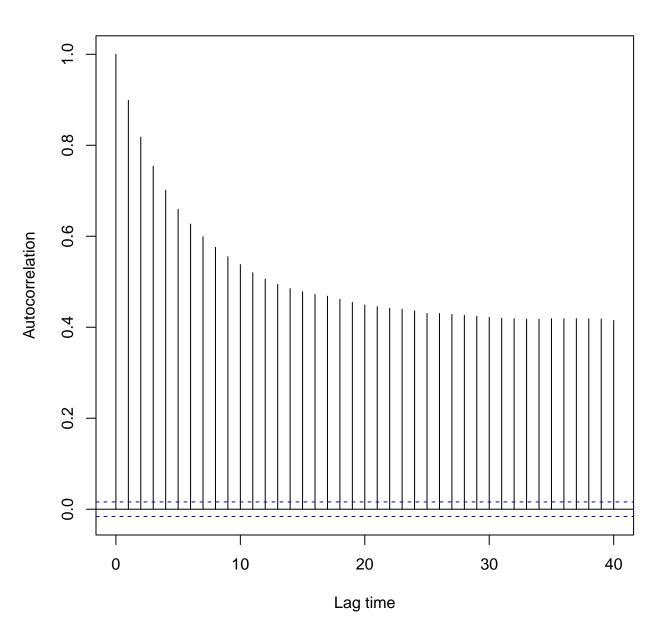
## **Selection D GAC Mixture: 2**



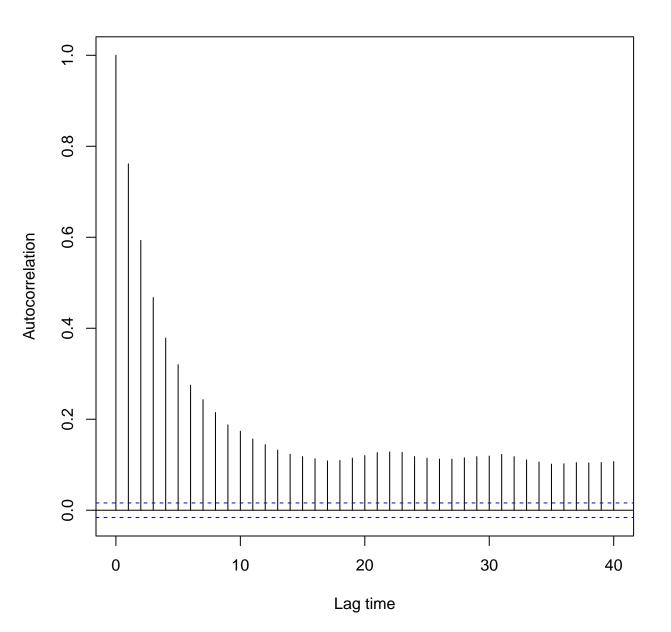
# **Selection E GAA Mixture: 1**



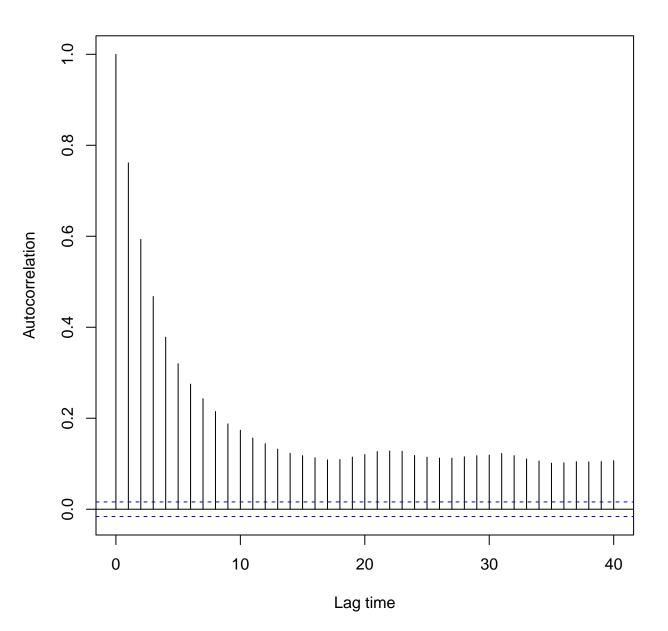
## **Selection E GAA Mixture: 2**



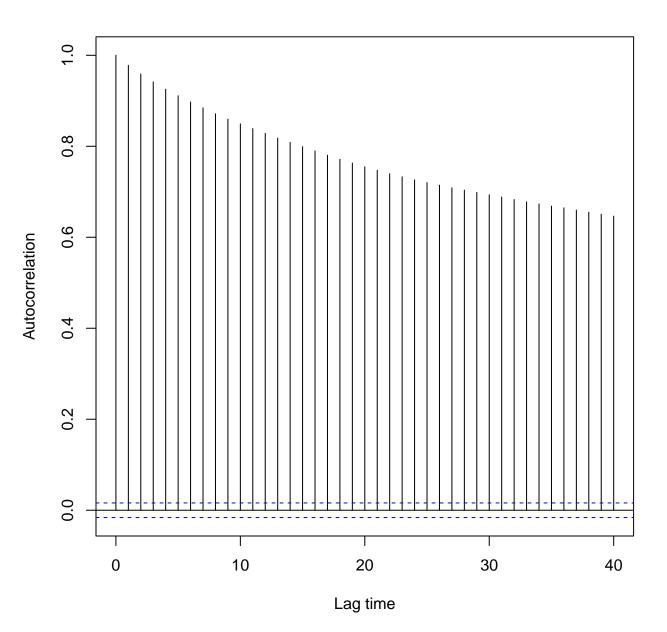
# **Selection F TTC Mixture: 1**



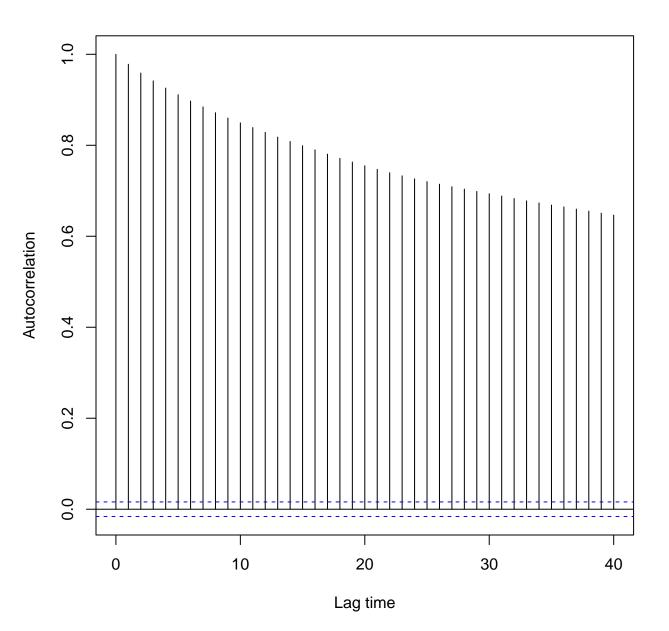
# **Selection F TTC Mixture: 2**



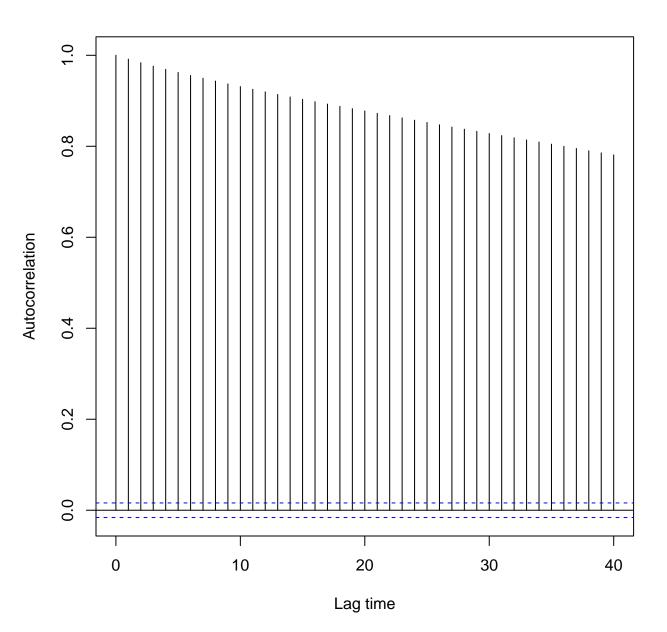
## **Selection G GGA Mixture: 1**



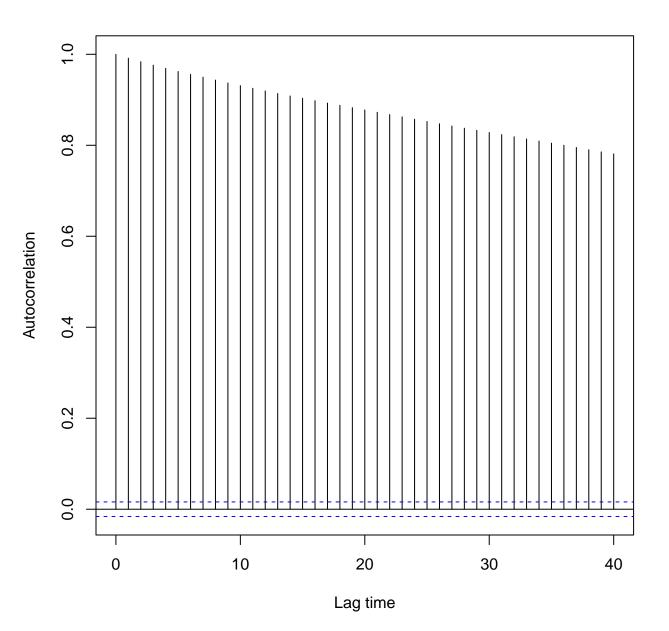
## **Selection G GGA Mixture: 2**



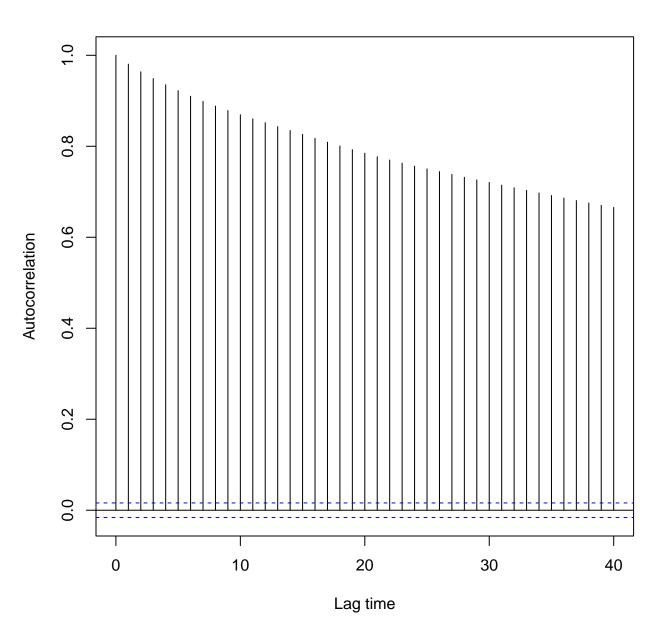
#### **Selection G GGC Mixture: 1**



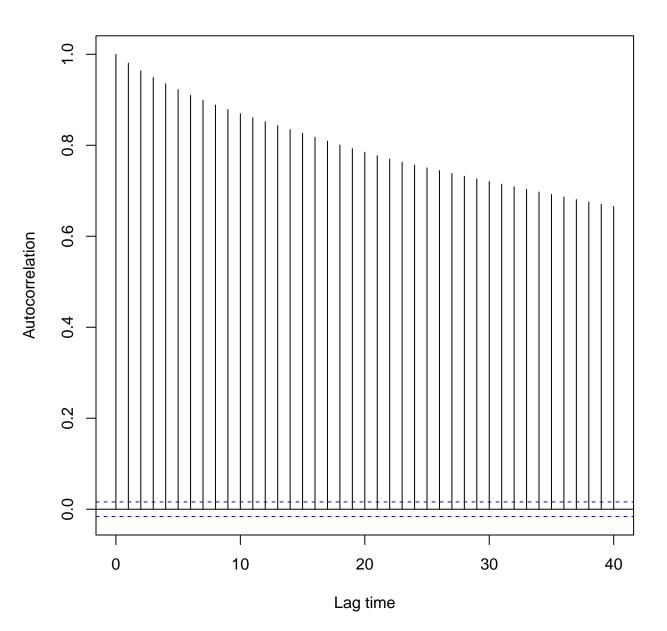
## **Selection G GGC Mixture: 2**



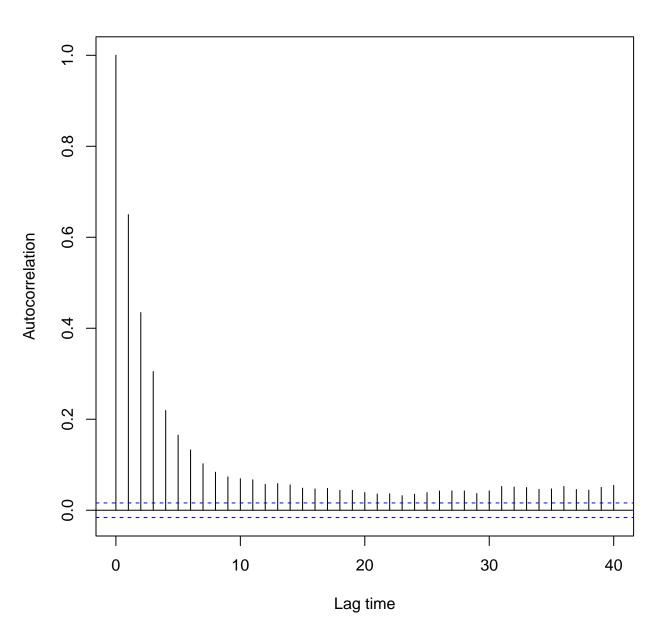
## **Selection G GGG Mixture: 1**



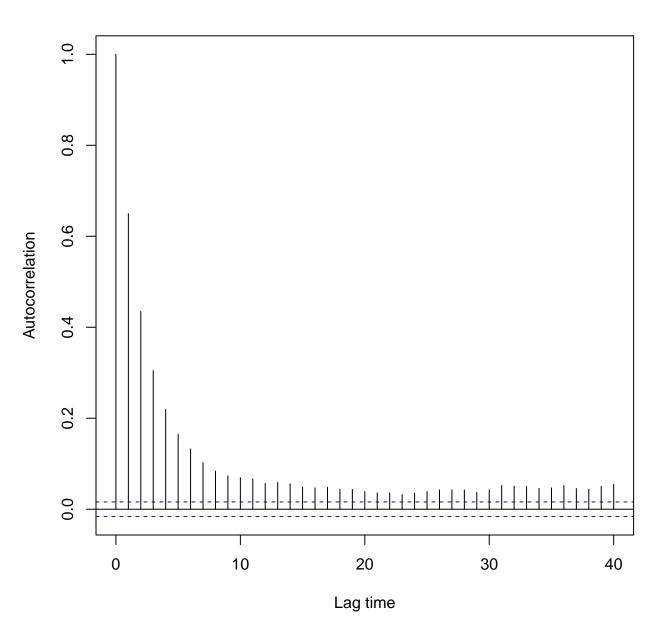
## **Selection G GGG Mixture: 2**



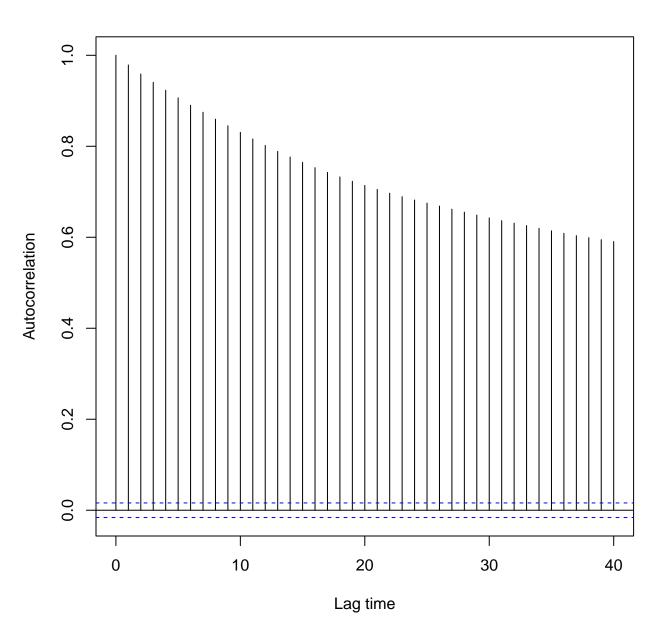
## **Selection H CAC Mixture: 1**



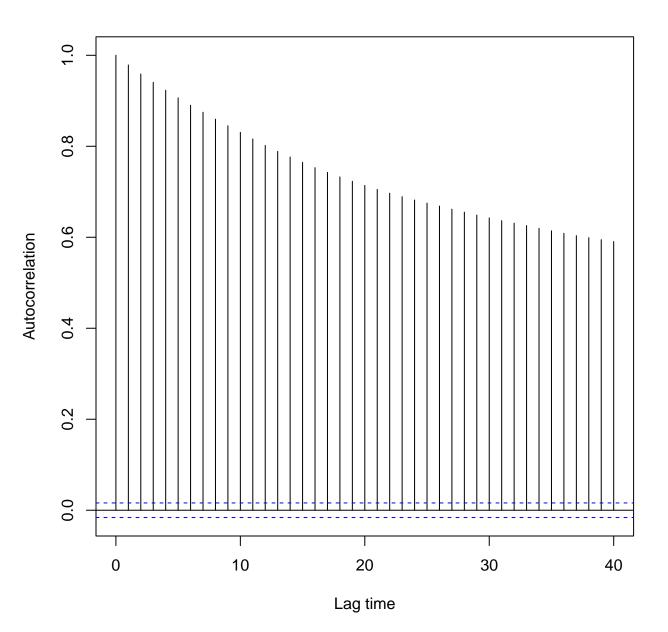
## **Selection H CAC Mixture: 2**



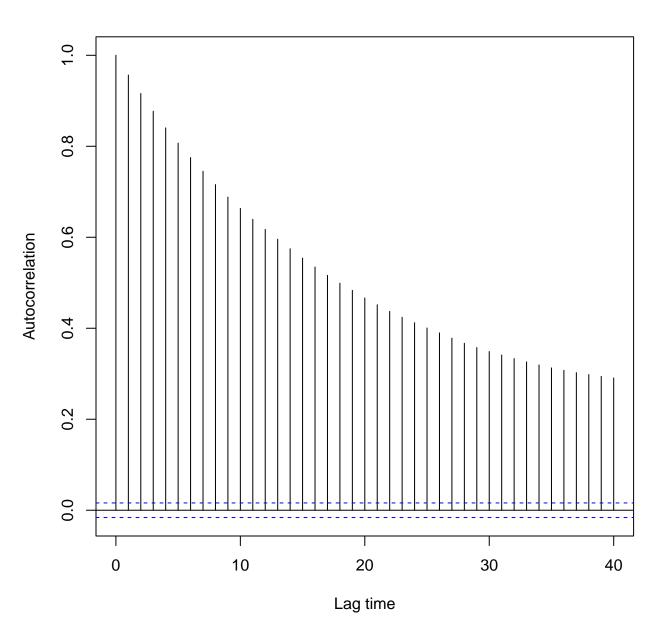
#### **Selection I ATA Mixture: 1**



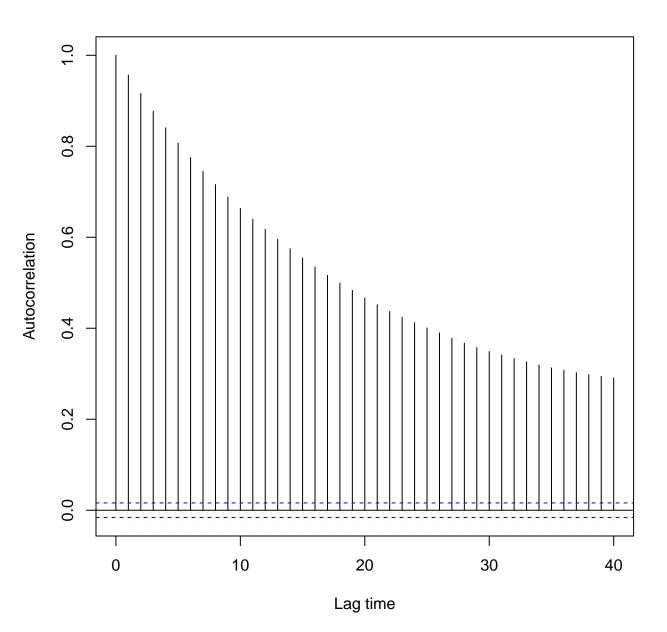
#### **Selection I ATA Mixture: 2**



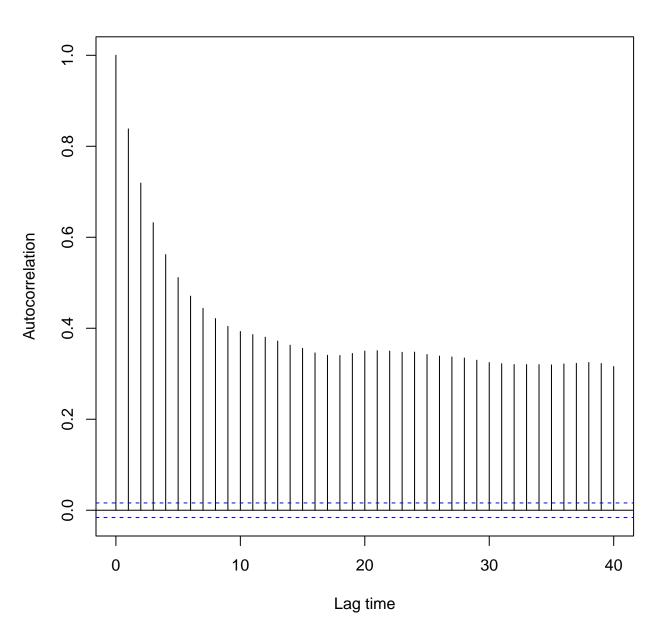
## **Selection I ATC Mixture: 1**



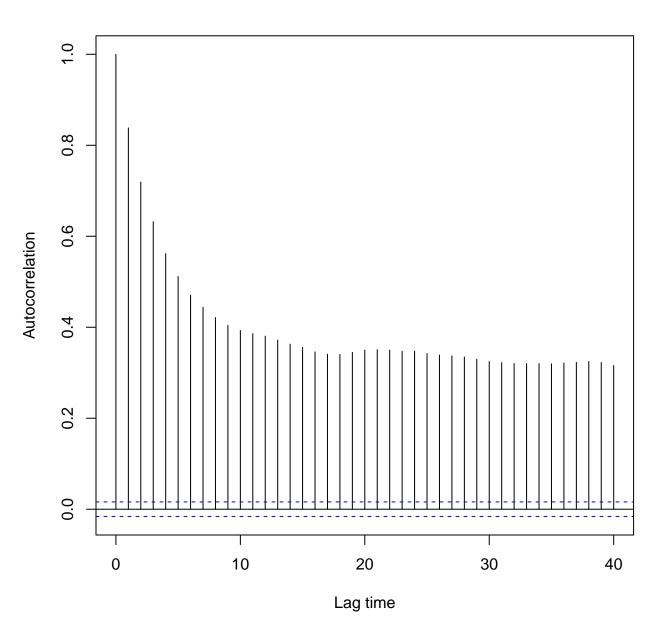
## **Selection I ATC Mixture: 2**



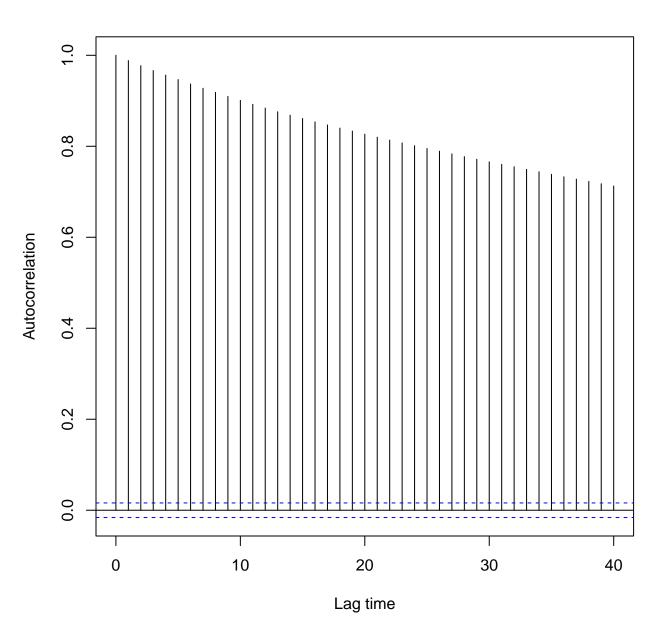
## **Selection K AAA Mixture: 1**



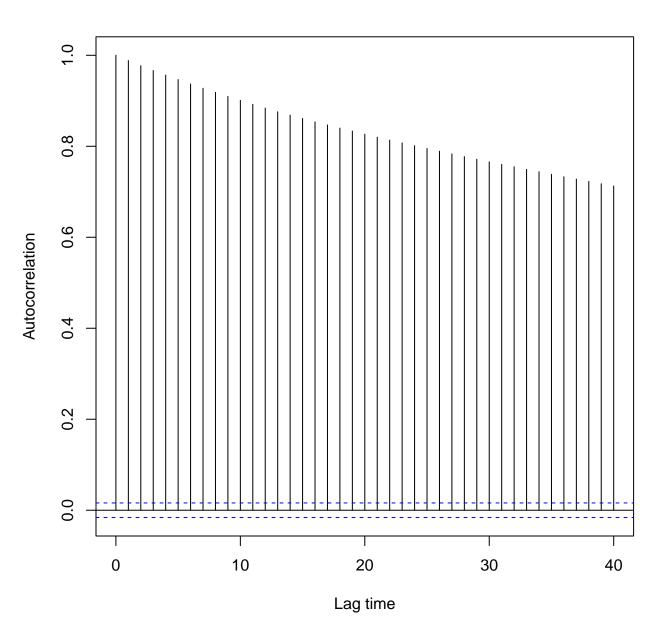
#### **Selection K AAA Mixture: 2**



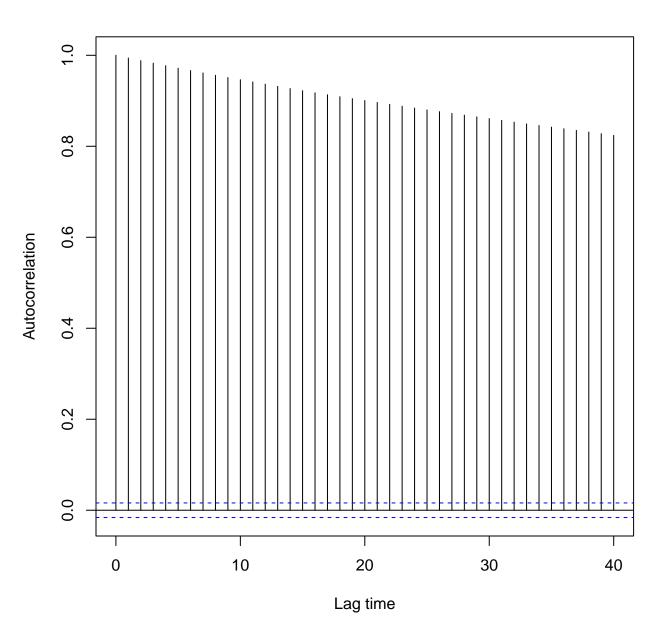
#### **Selection L CTA Mixture: 1**



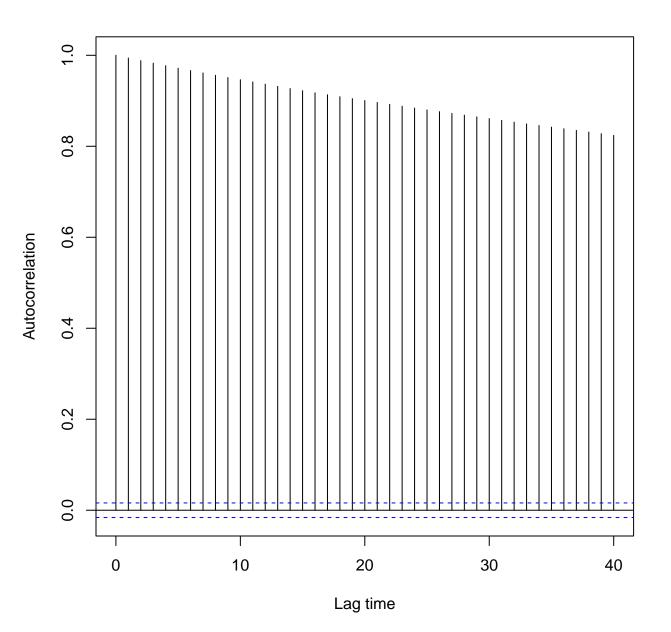
#### **Selection L CTA Mixture: 2**



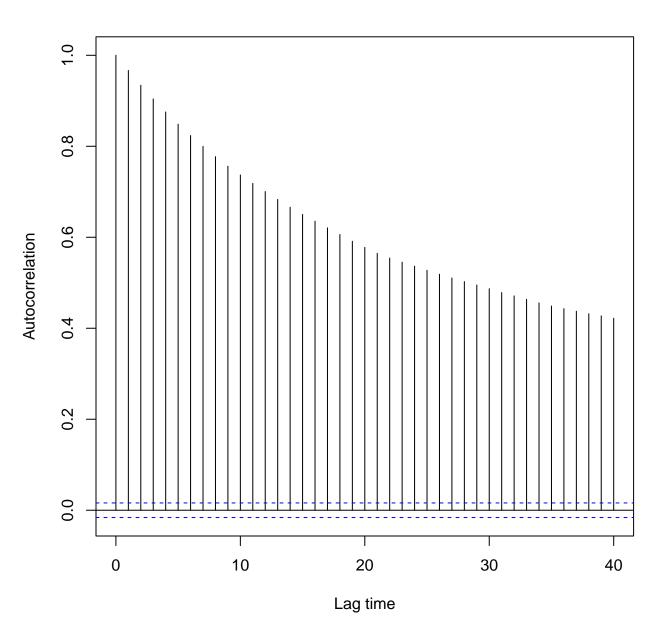
# **Selection L CTC Mixture: 1**



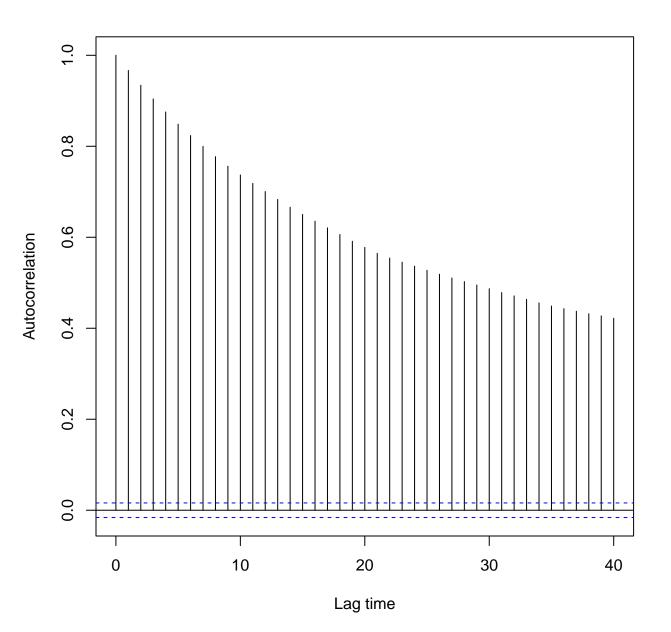
# **Selection L CTC Mixture: 2**



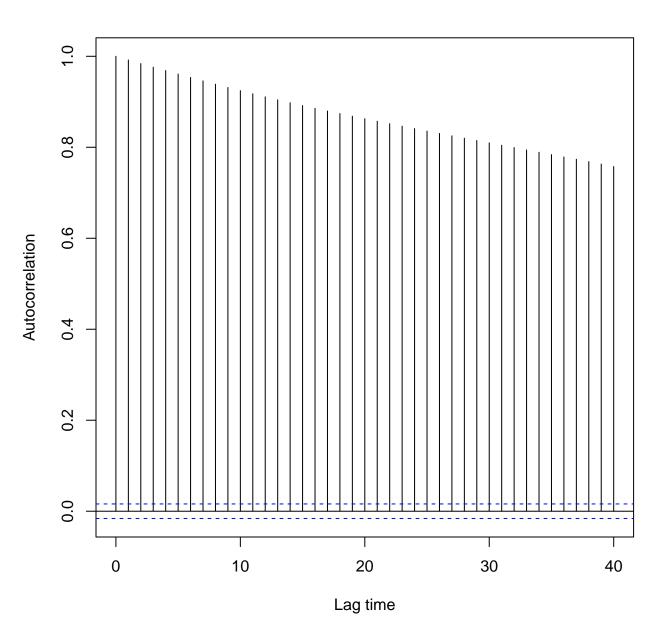
# **Selection L CTT Mixture: 1**



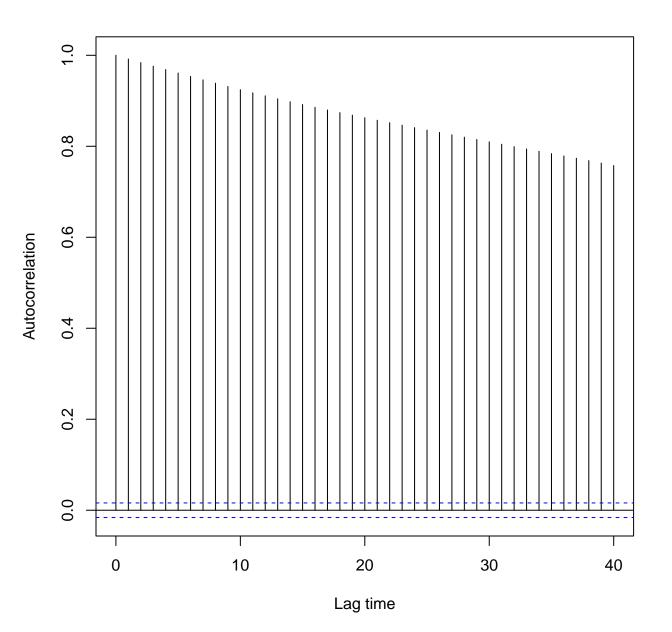
#### **Selection L CTT Mixture: 2**



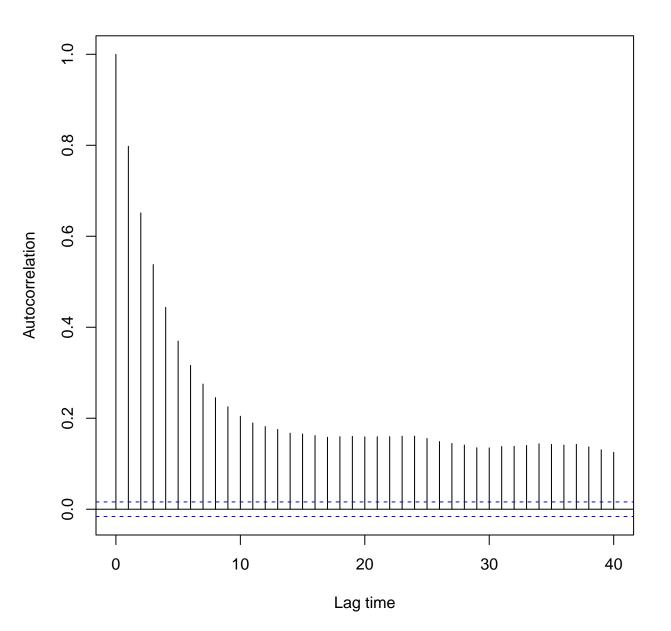
## **Selection L TTA Mixture: 1**



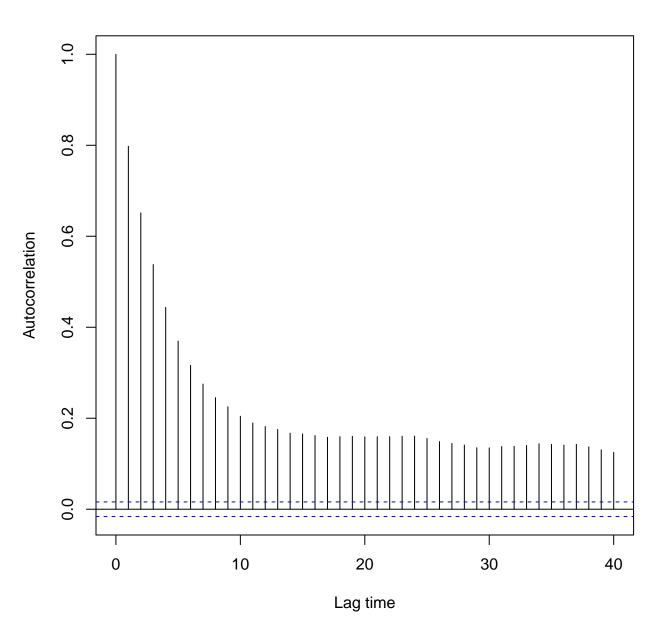
## **Selection L TTA Mixture: 2**



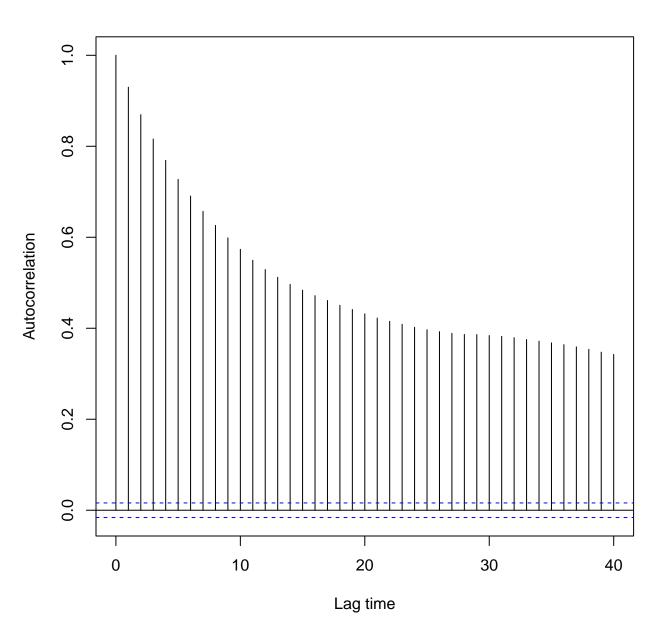
## **Selection N AAC Mixture: 1**



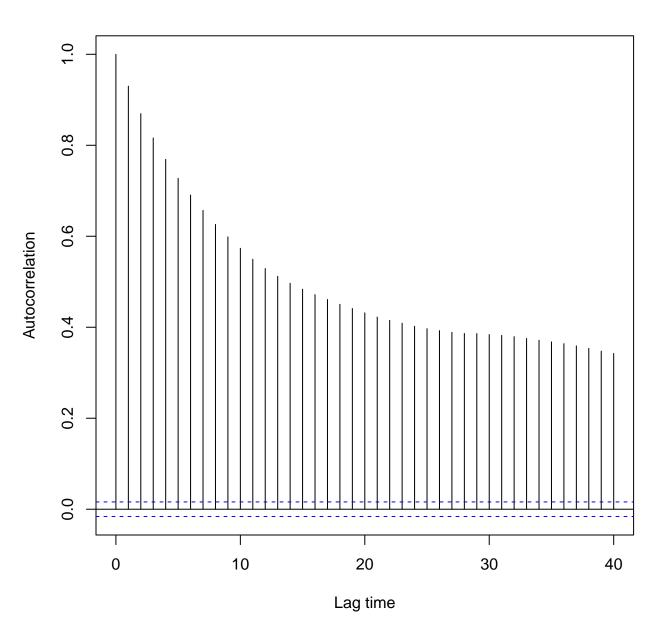
#### **Selection N AAC Mixture: 2**



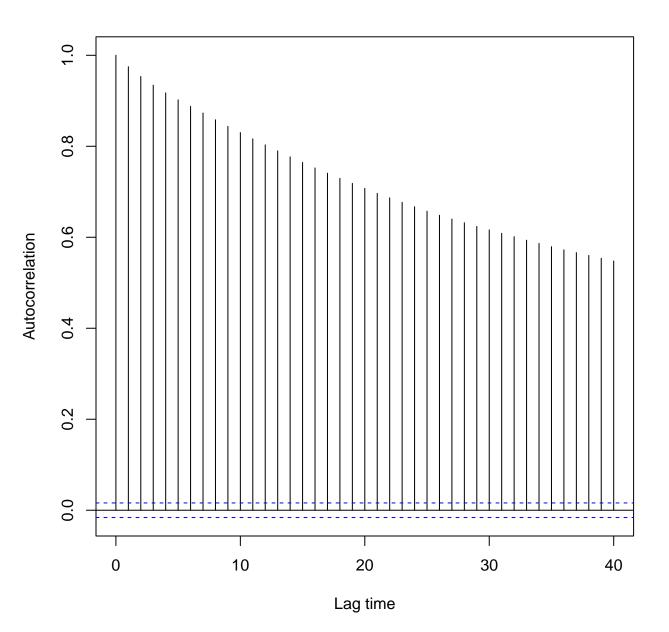
# **Selection P CCA Mixture: 1**



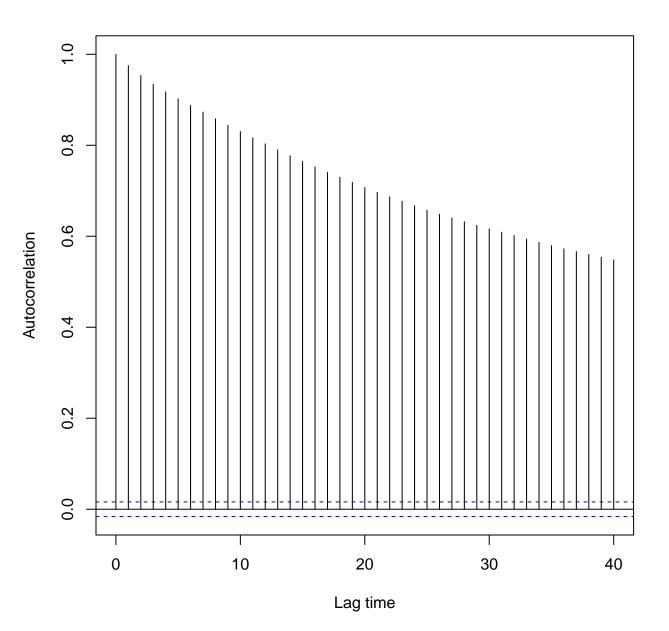
## **Selection P CCA Mixture: 2**



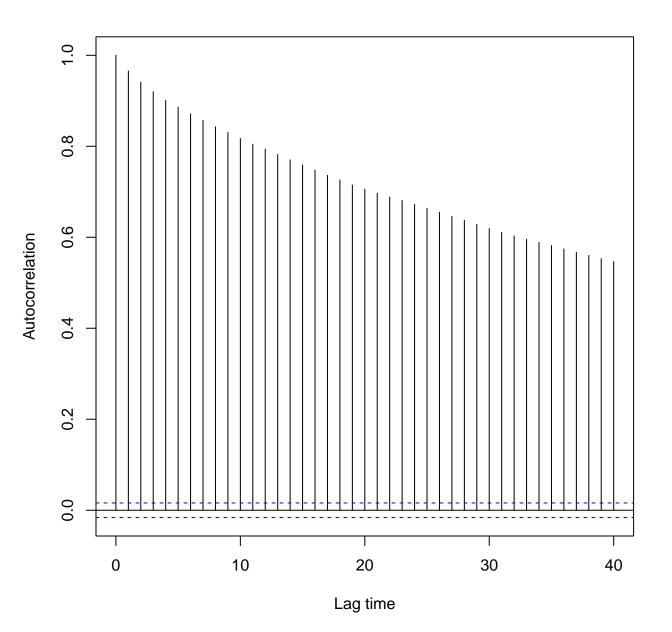
# **Selection P CCC Mixture: 1**



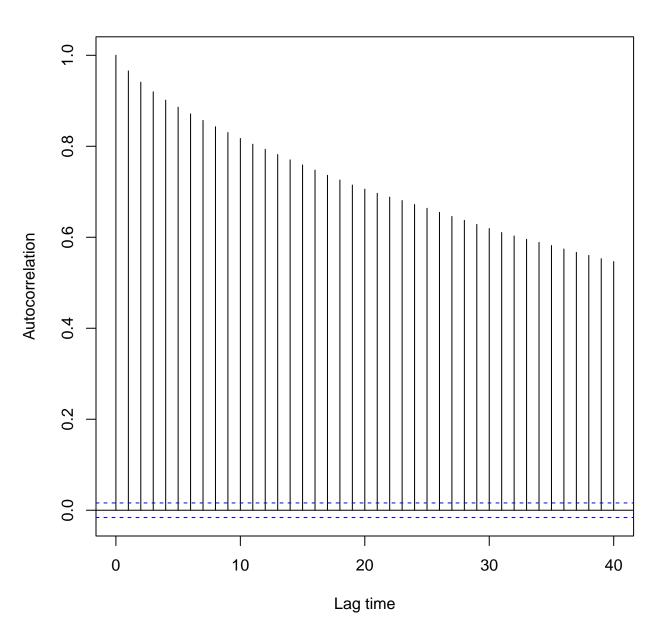
# **Selection P CCC Mixture: 2**



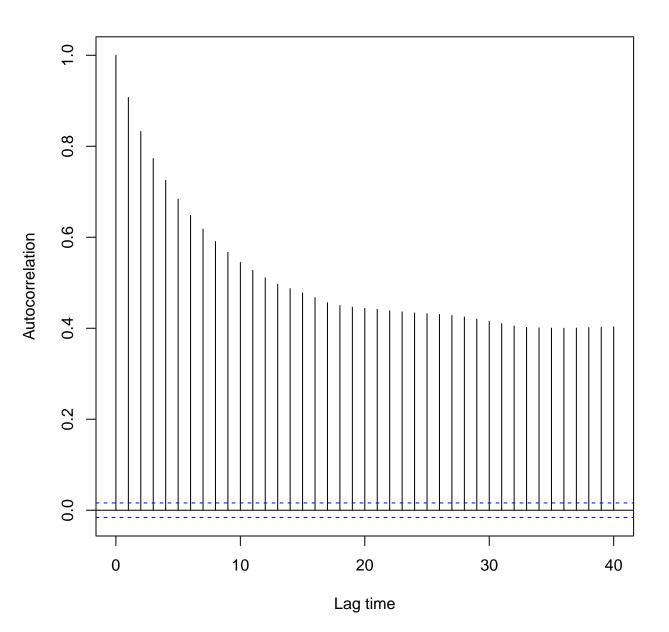
## **Selection P CCG Mixture: 1**



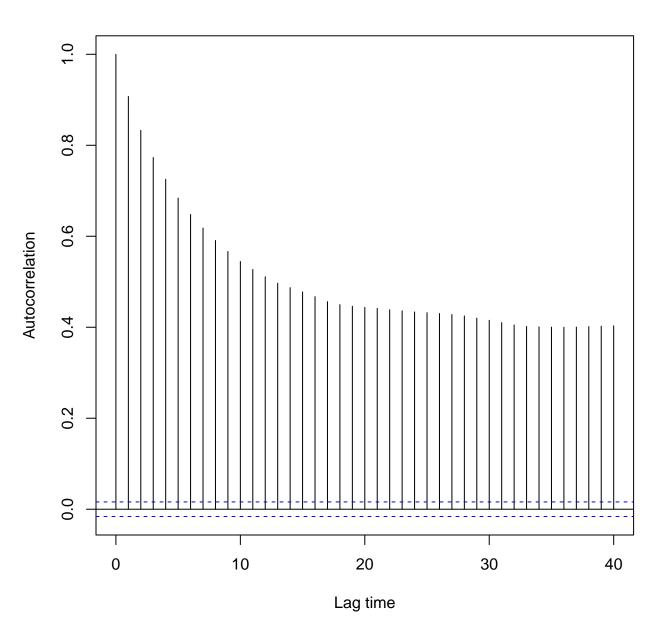
## **Selection P CCG Mixture: 2**



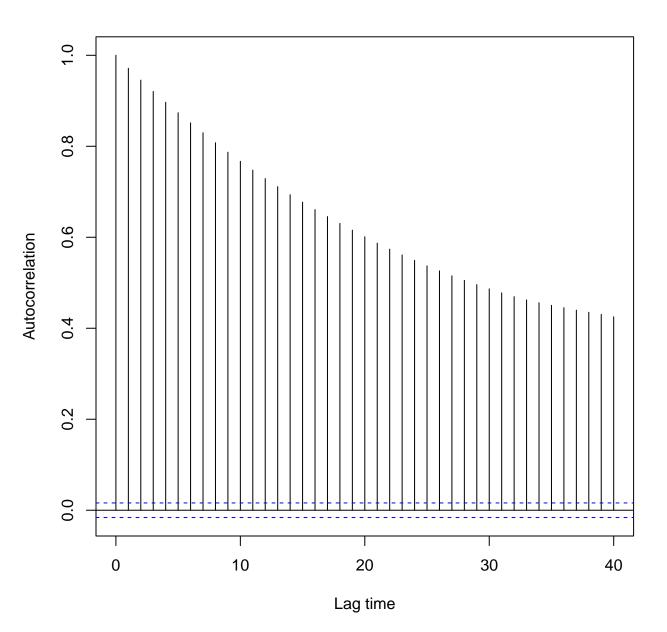
#### **Selection Q CAA Mixture: 1**



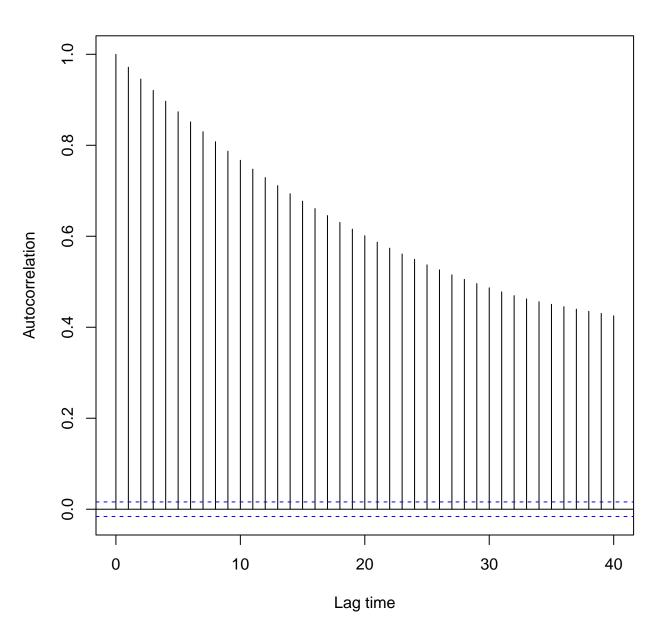
## **Selection Q CAA Mixture: 2**



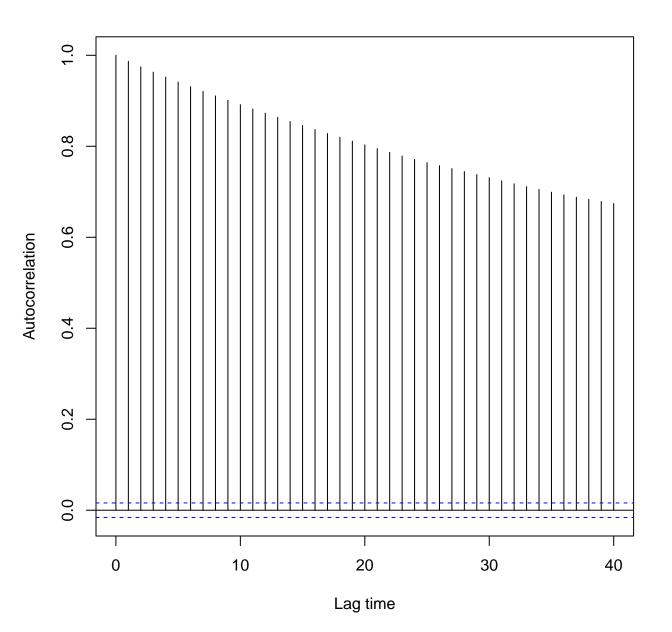
#### **Selection R AGA Mixture: 1**



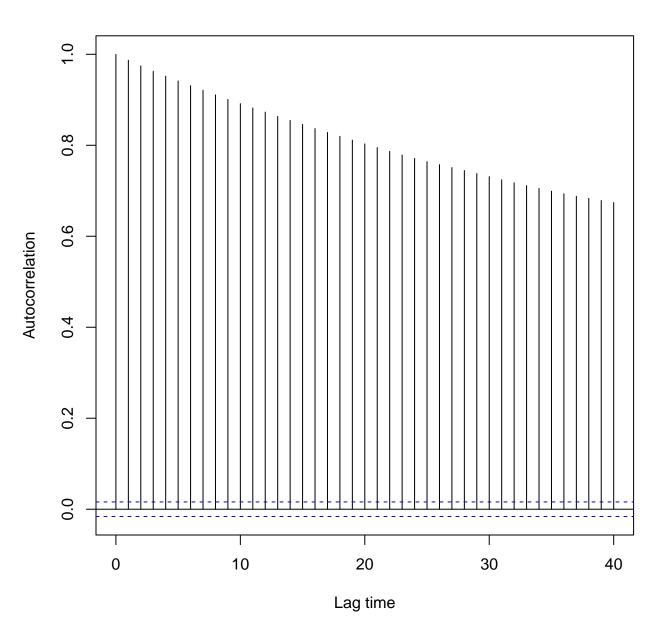
#### **Selection R AGA Mixture: 2**



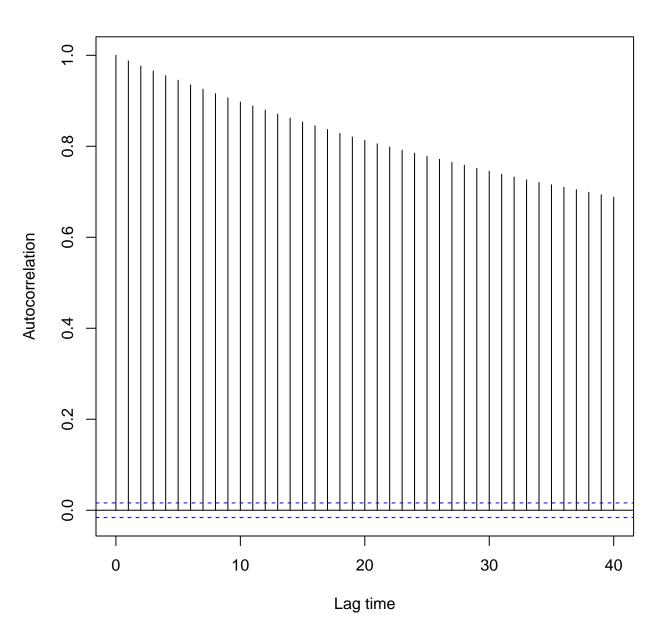
# **Selection R AGG Mixture: 1**



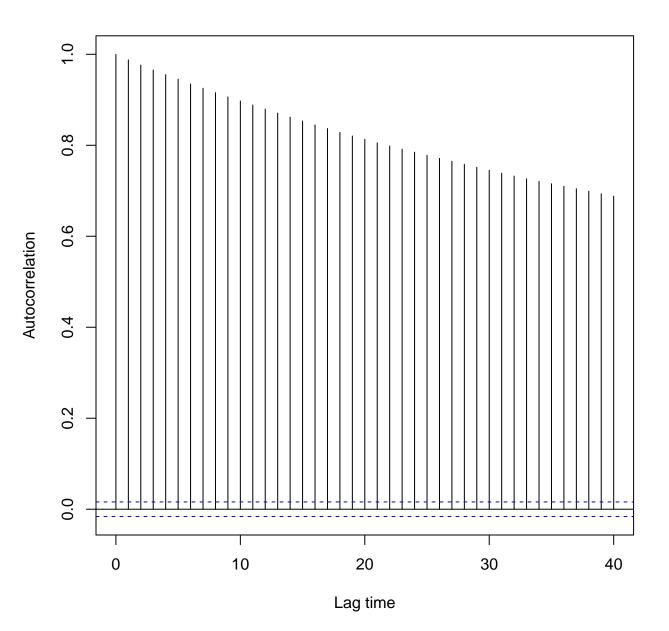
#### **Selection R AGG Mixture: 2**



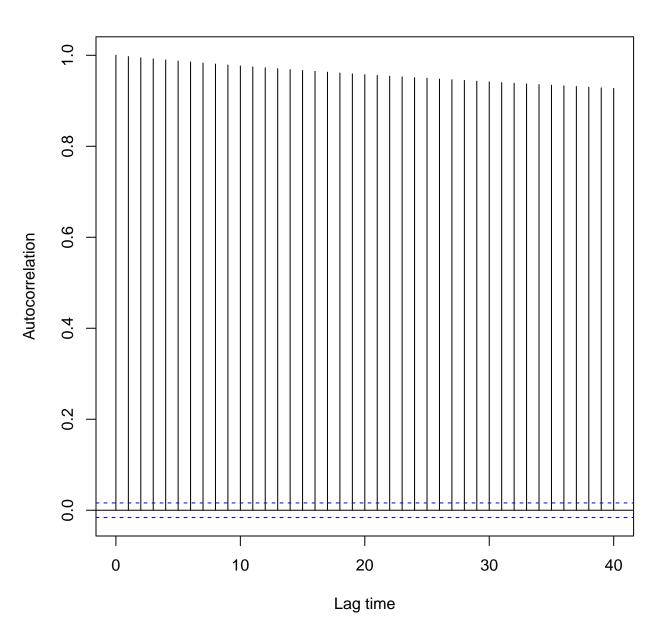
## **Selection R CGA Mixture: 1**



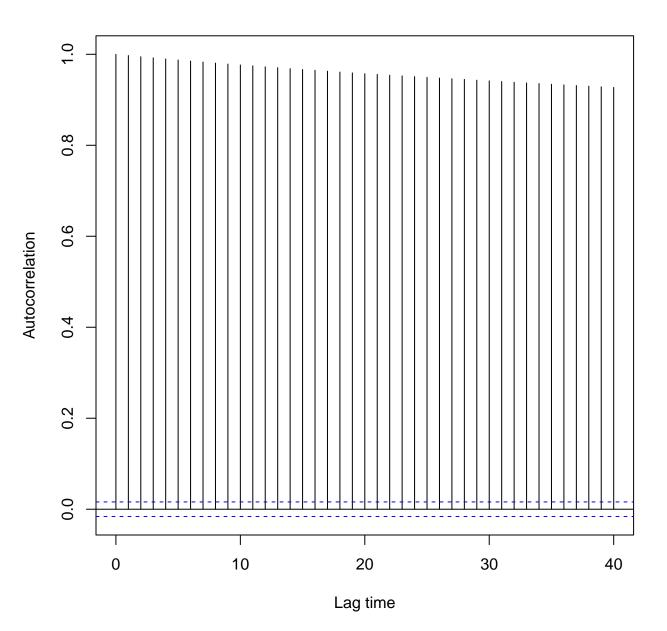
# **Selection R CGA Mixture: 2**



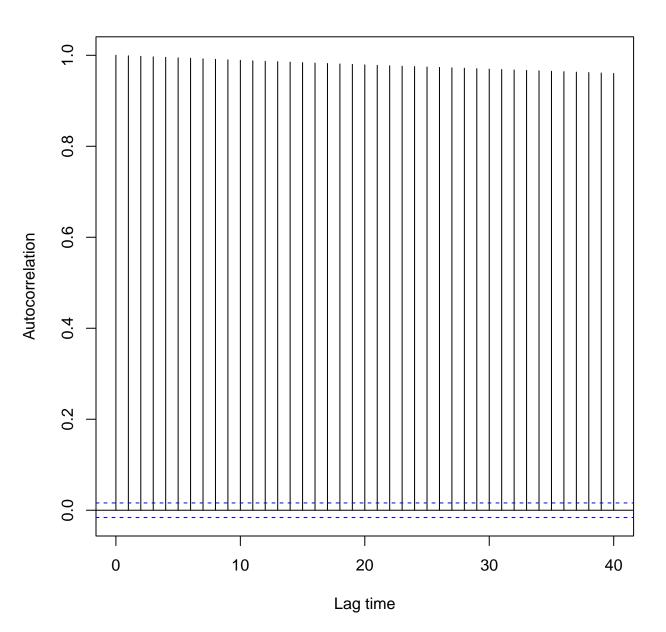
# **Selection R CGC Mixture: 1**



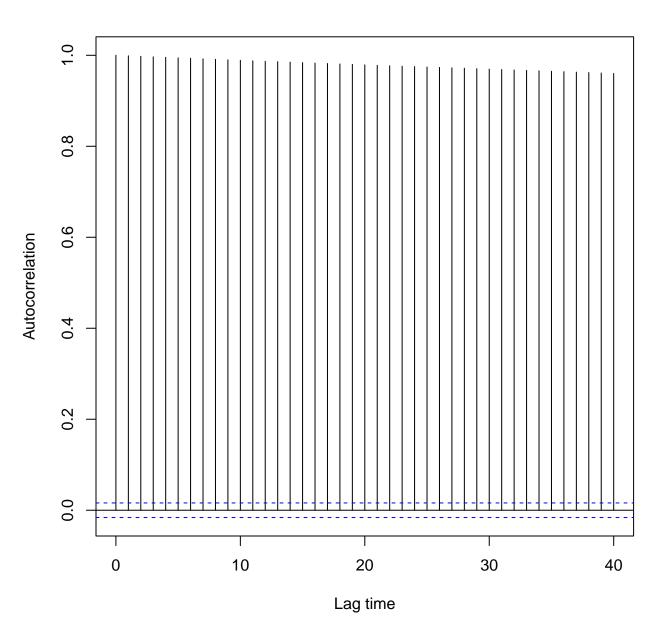
#### **Selection R CGC Mixture: 2**



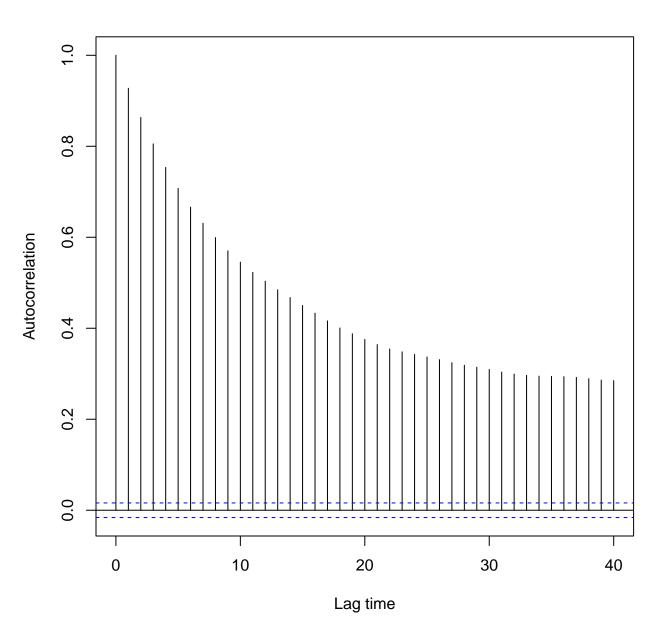
## **Selection R CGG Mixture: 1**



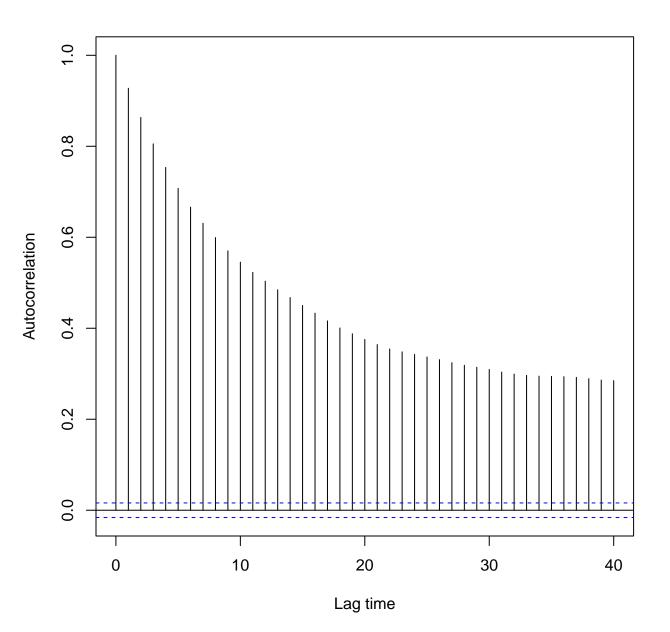
#### **Selection R CGG Mixture: 2**



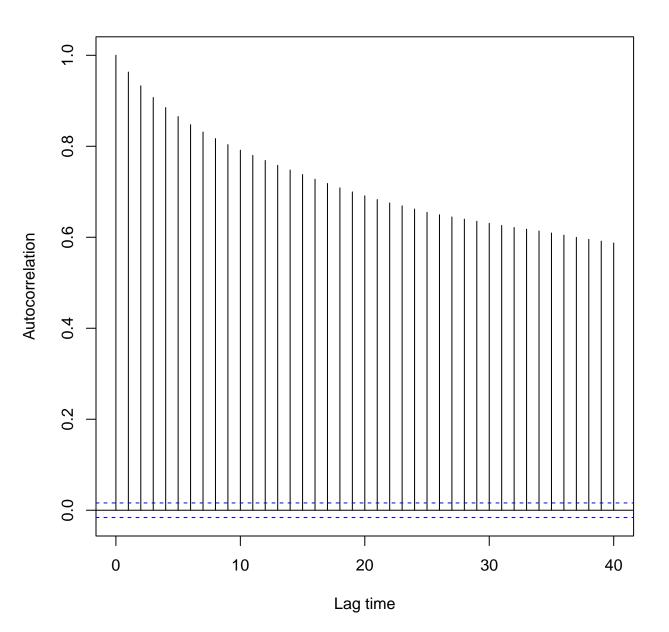
# **Selection S TCA Mixture: 1**



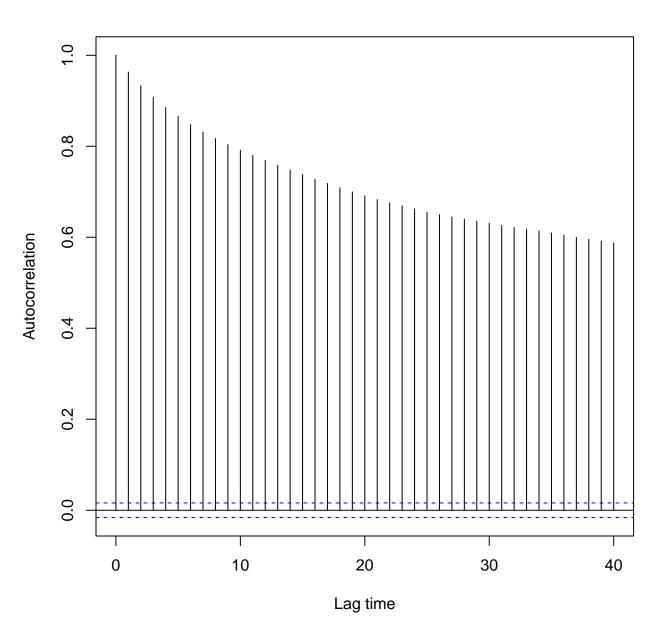
# **Selection S TCA Mixture: 2**



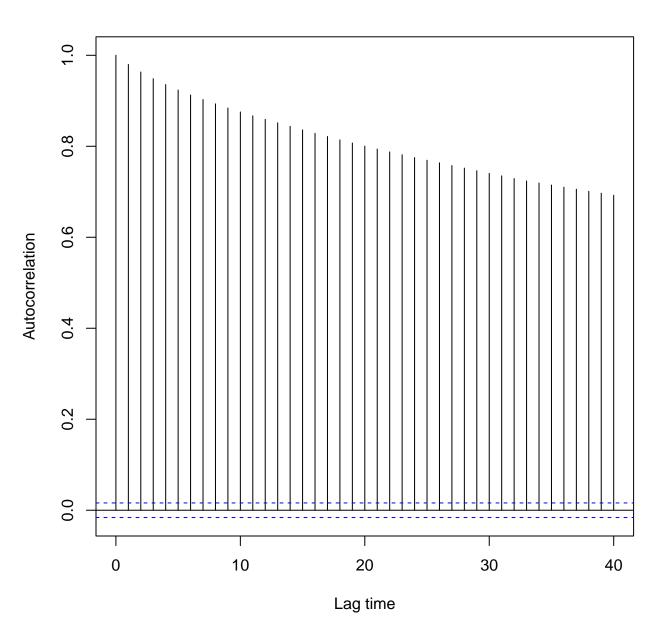
# **Selection S TCC Mixture: 1**



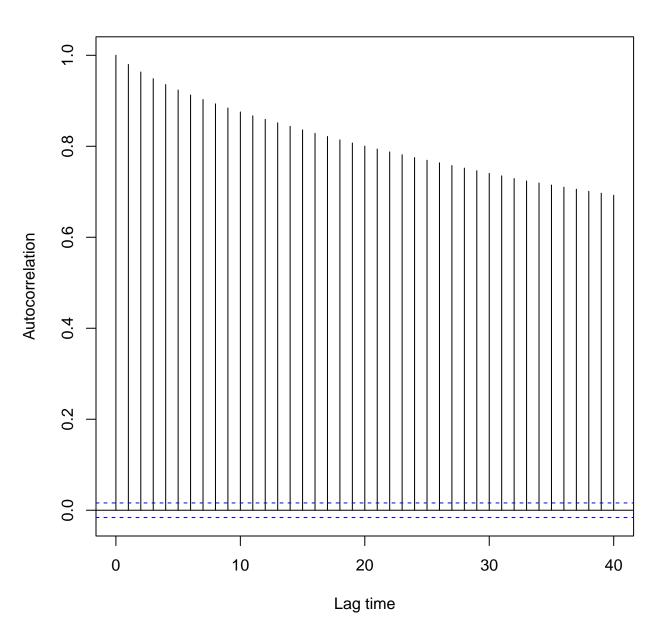
# **Selection S TCC Mixture: 2**



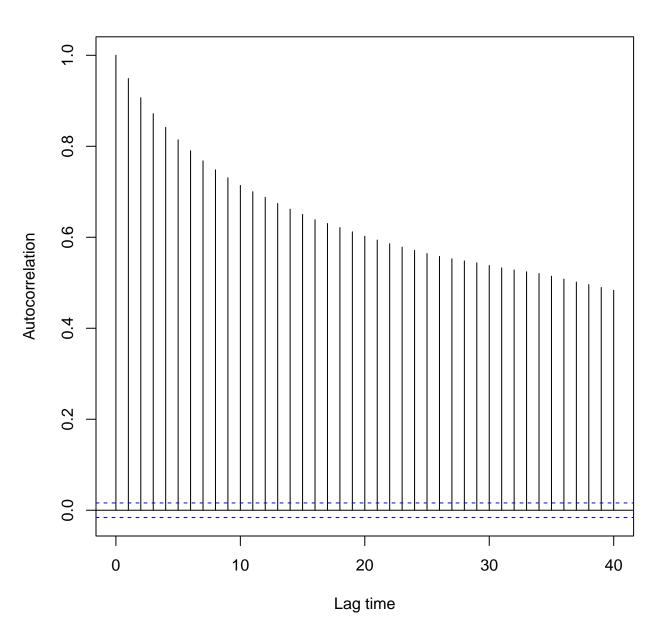
#### **Selection S TCG Mixture: 1**



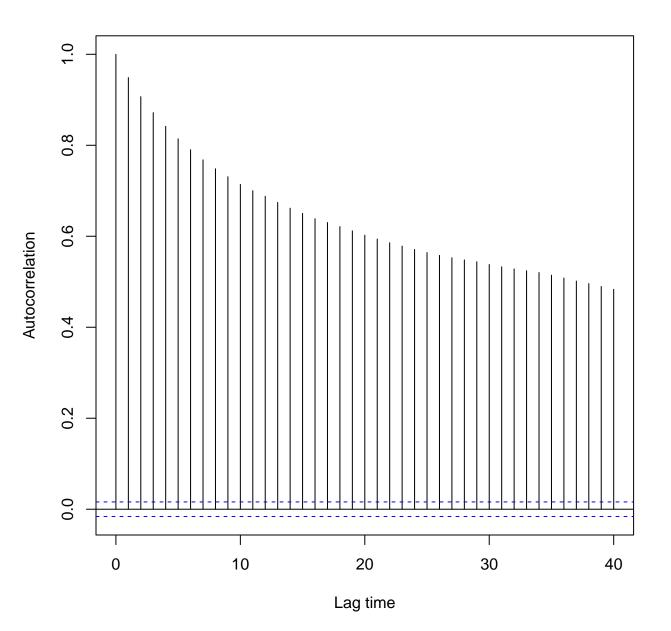
#### **Selection S TCG Mixture: 2**



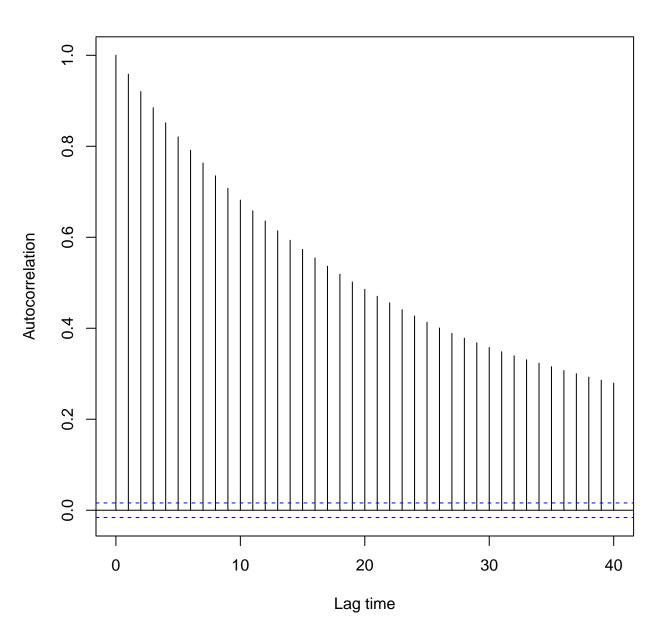
## **Selection T ACA Mixture: 1**



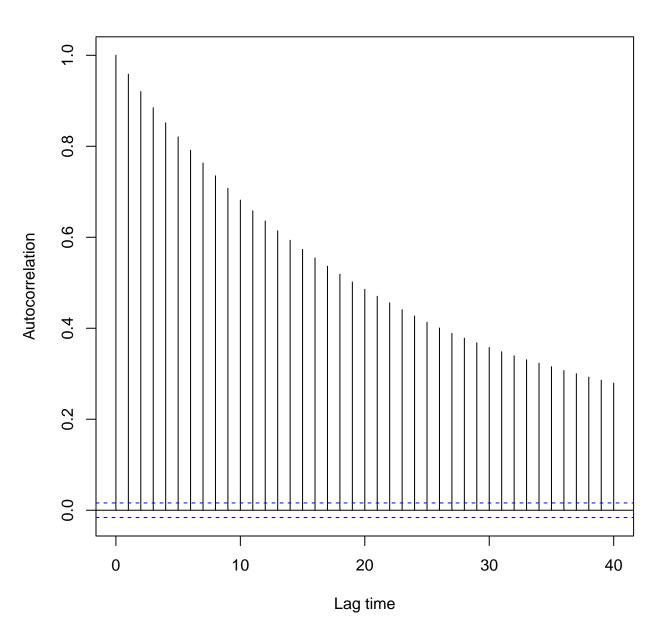
## **Selection T ACA Mixture: 2**



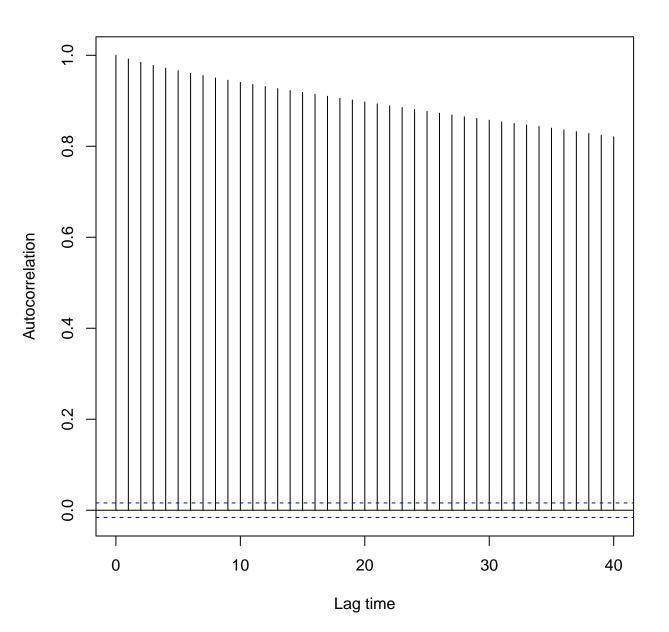
# **Selection T ACC Mixture: 1**



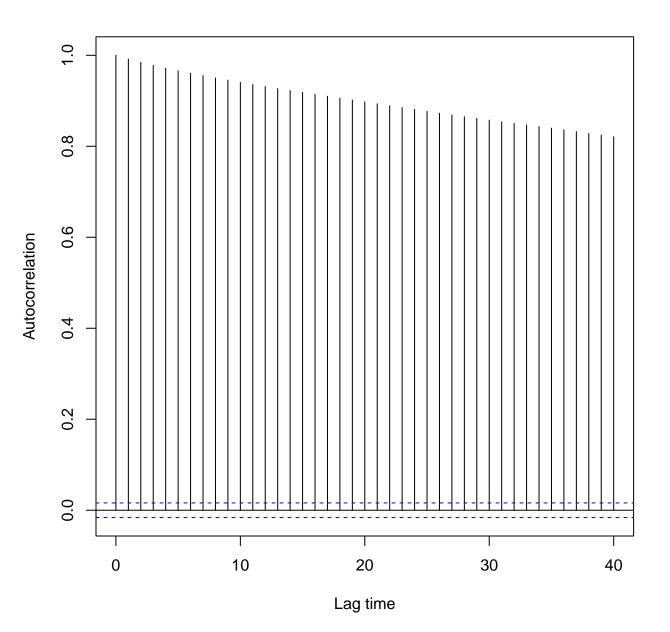
# **Selection T ACC Mixture: 2**



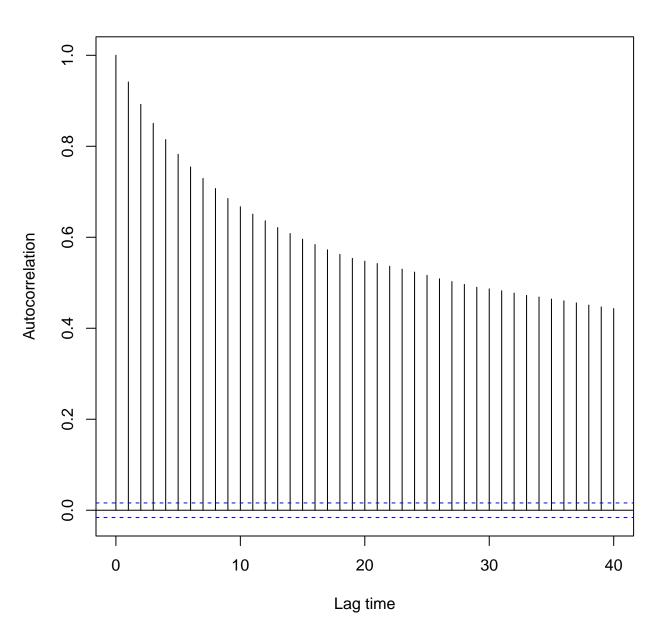
## **Selection T ACG Mixture: 1**



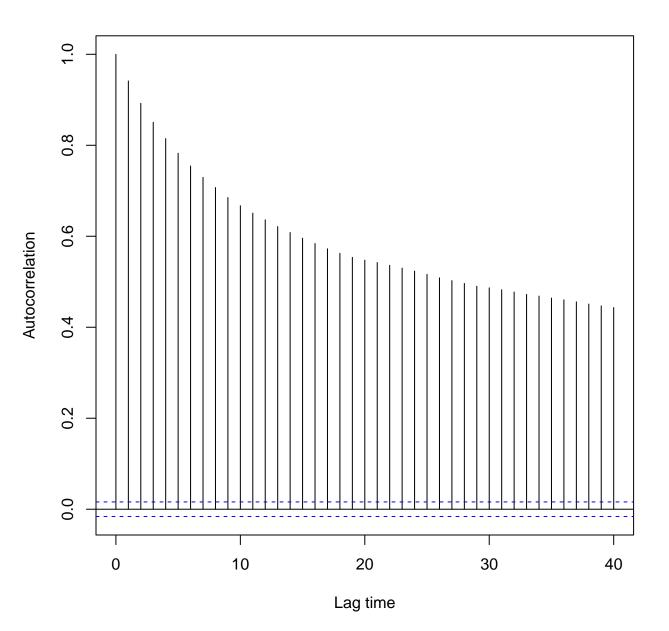
#### **Selection T ACG Mixture: 2**



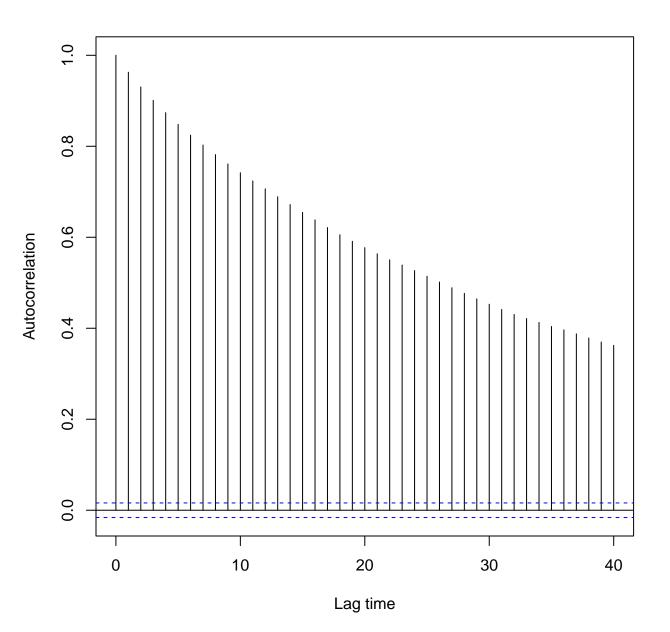
# **Selection V GTA Mixture: 1**



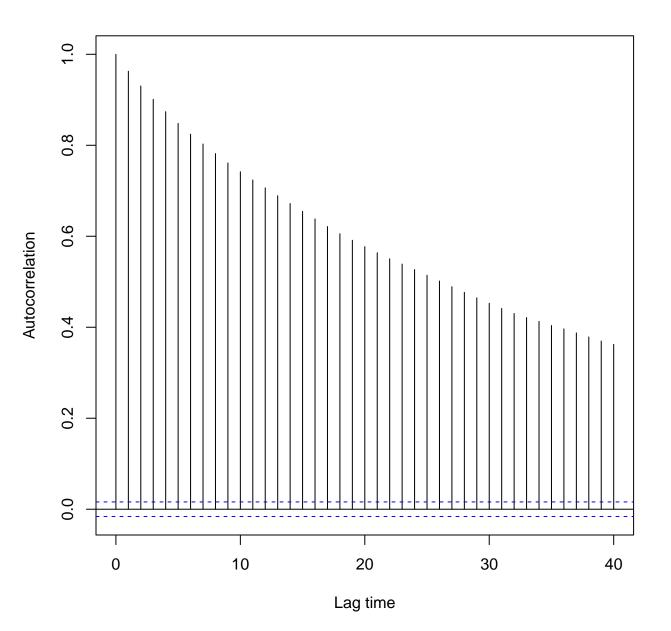
### **Selection V GTA Mixture: 2**



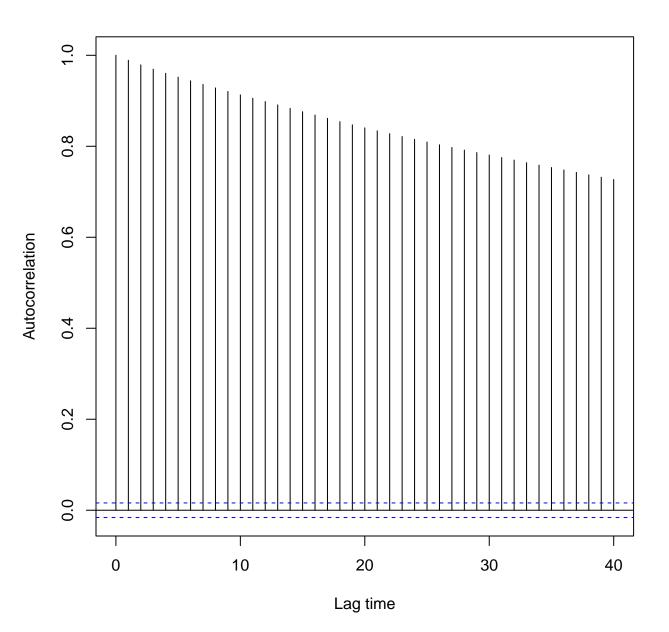
# **Selection V GTC Mixture: 1**



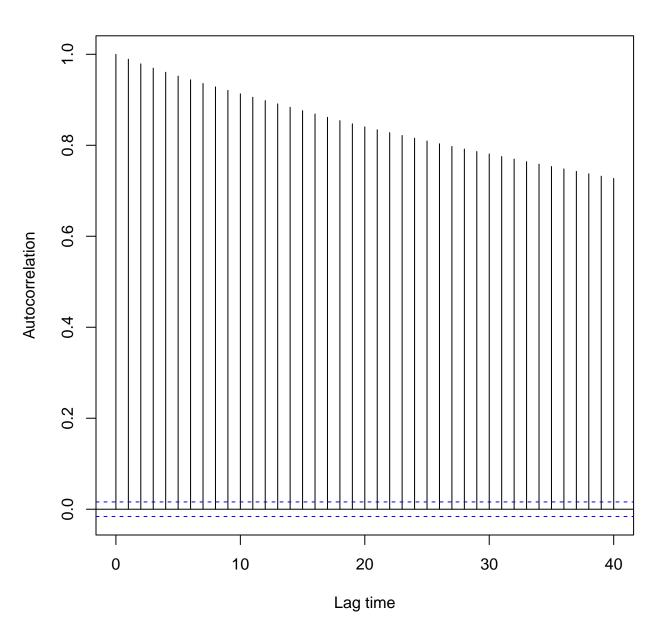
# **Selection V GTC Mixture: 2**



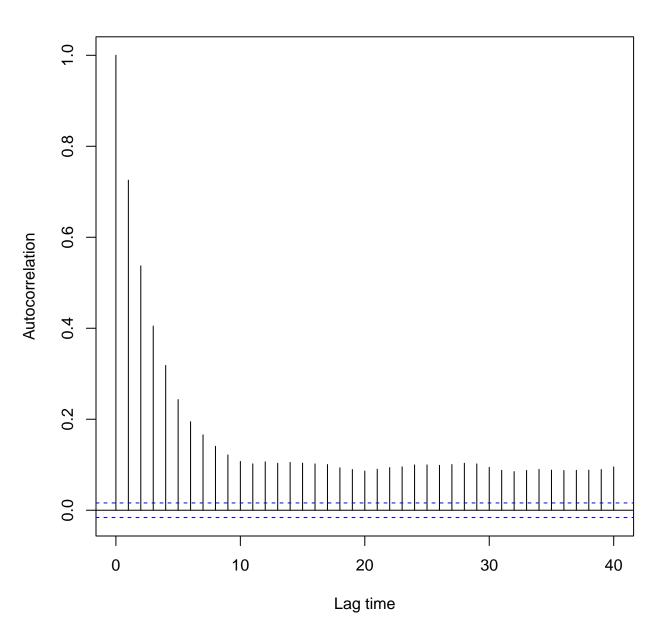
### **Selection V GTG Mixture: 1**



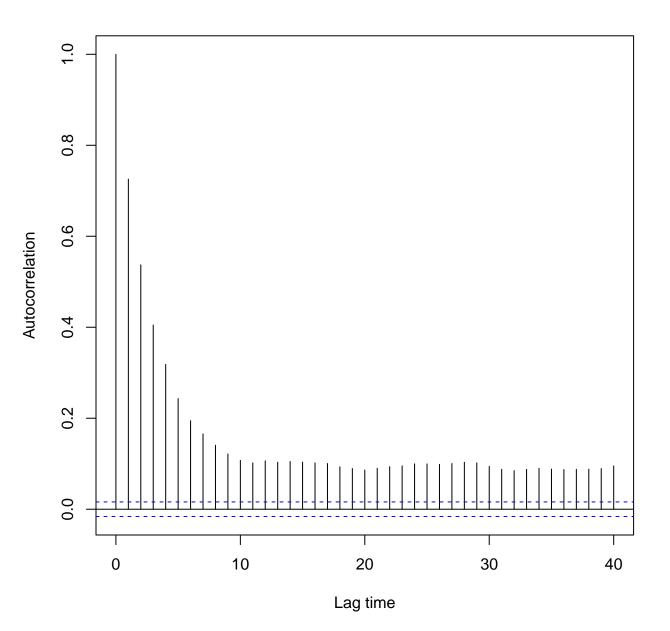
### **Selection V GTG Mixture: 2**



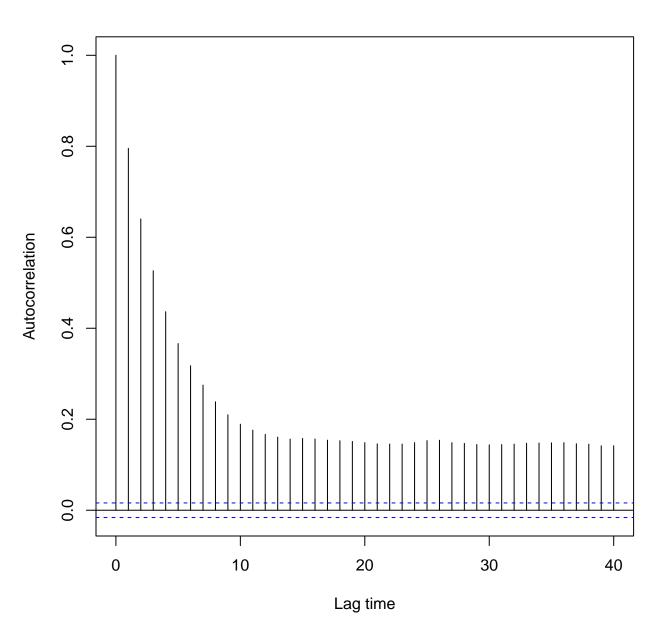
# **Selection Y TAC Mixture: 1**



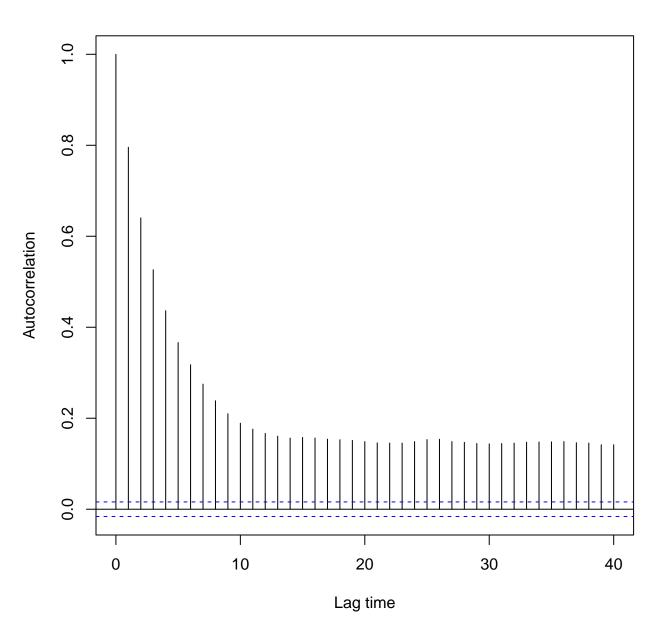
# **Selection Y TAC Mixture: 2**



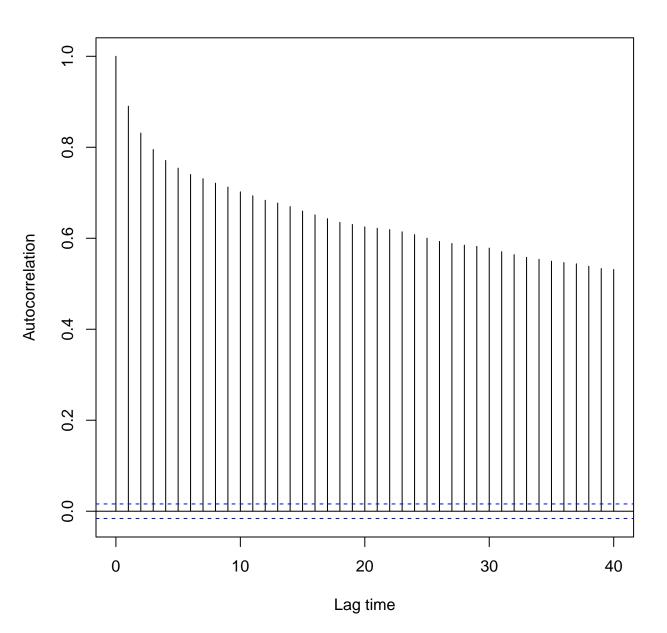
# **Selection Z AGC Mixture: 1**



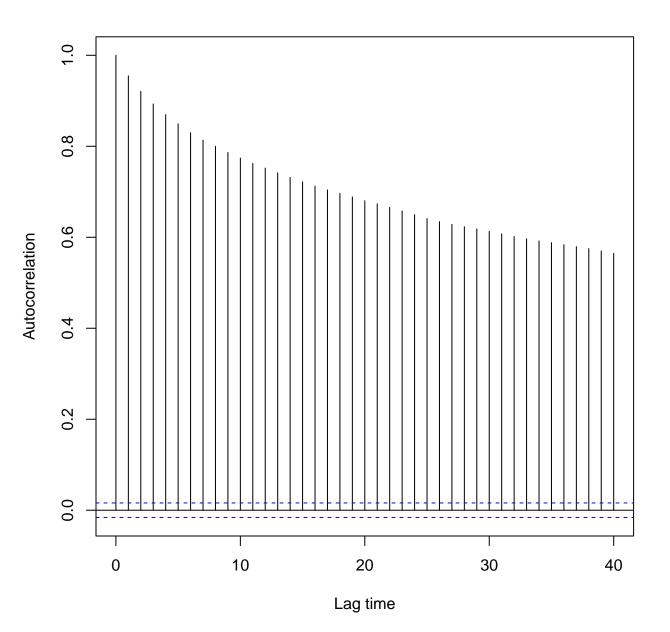
# **Selection Z AGC Mixture: 2**



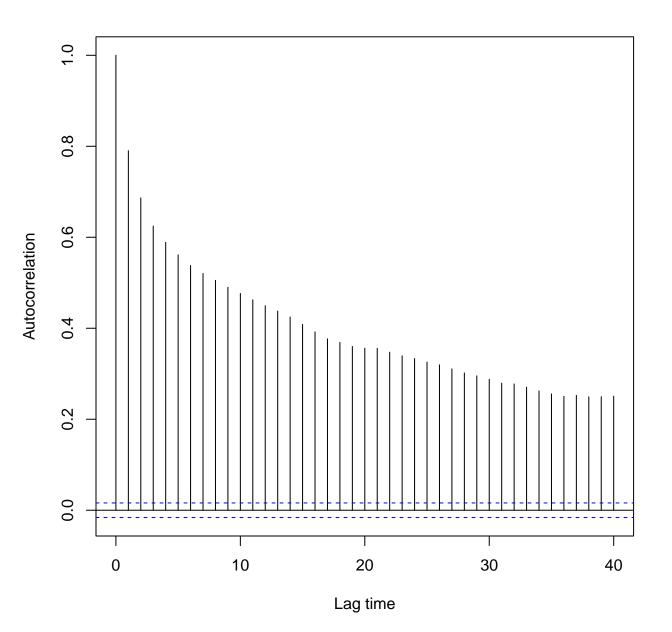
# **Mutation A GCA Mixture: 1**



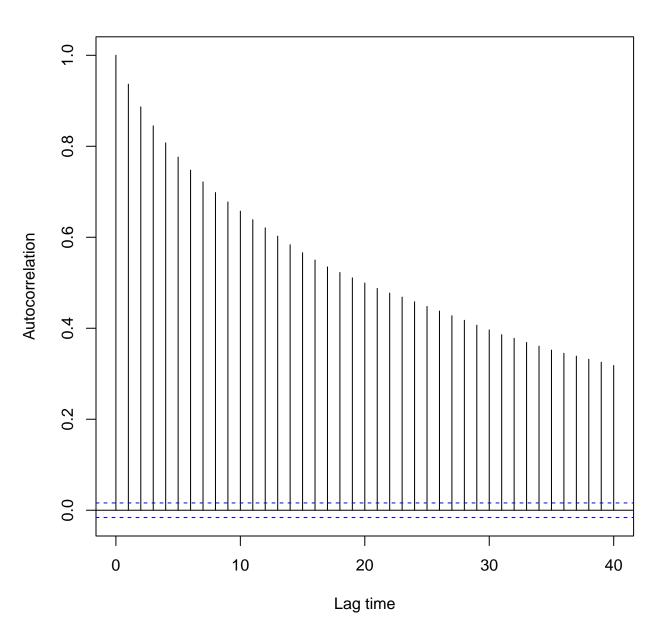
### **Mutation A GCA Mixture: 2**



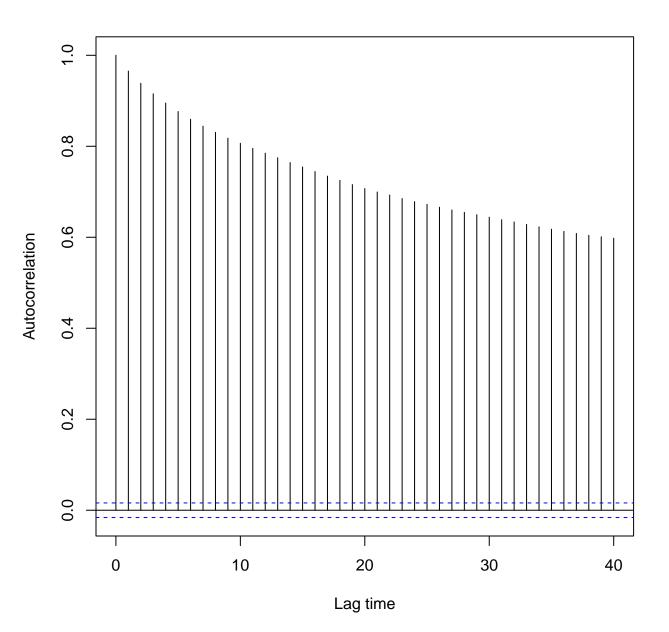
# **Mutation A GCC Mixture: 1**



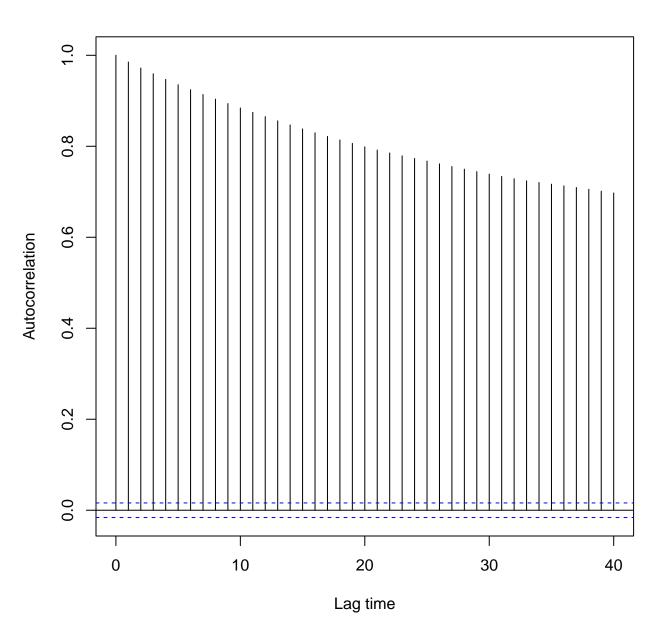
# **Mutation A GCC Mixture: 2**



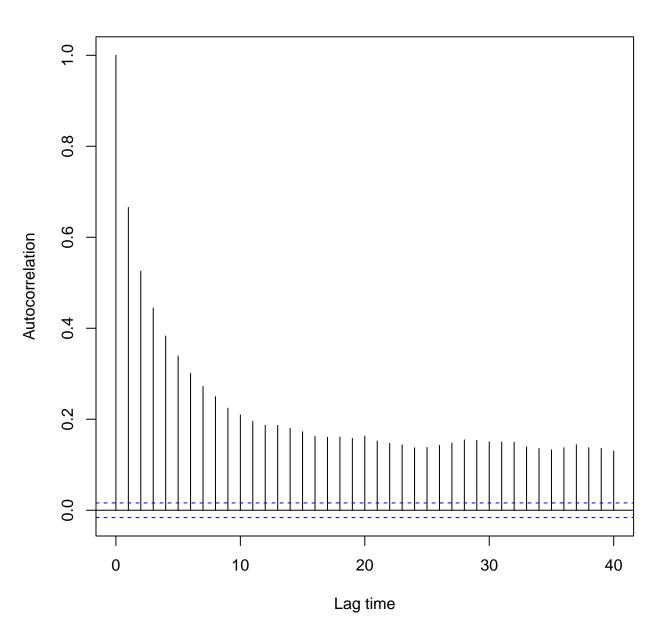
### **Mutation A GCG Mixture: 1**



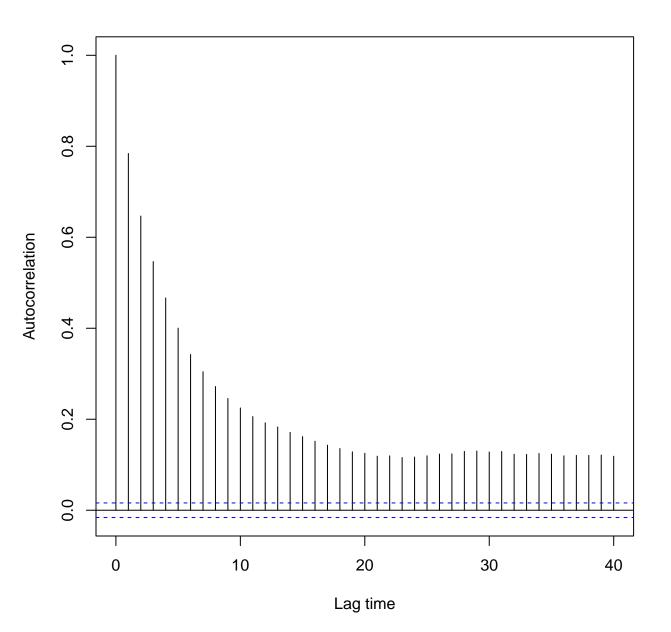
### **Mutation A GCG Mixture: 2**



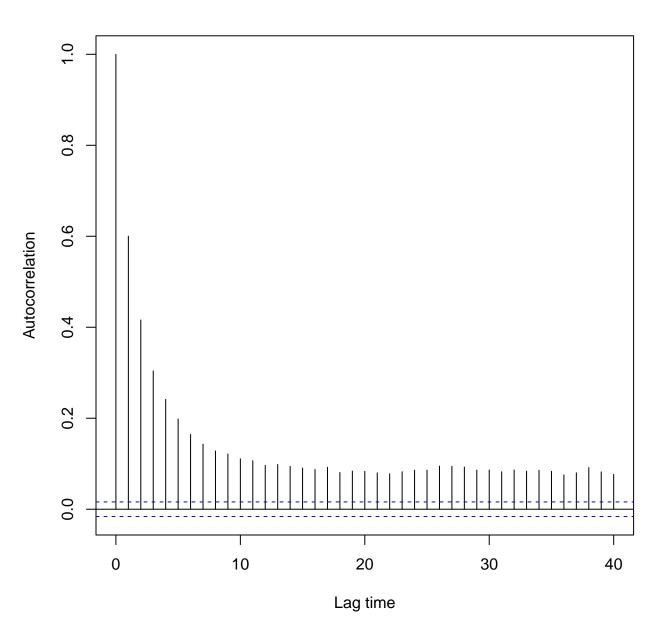
# **Mutation C TGC Mixture: 1**



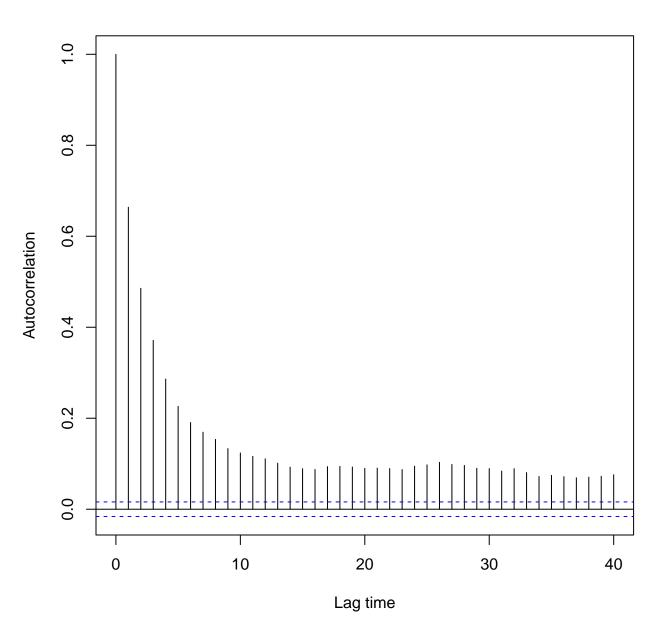
# **Mutation C TGC Mixture: 2**



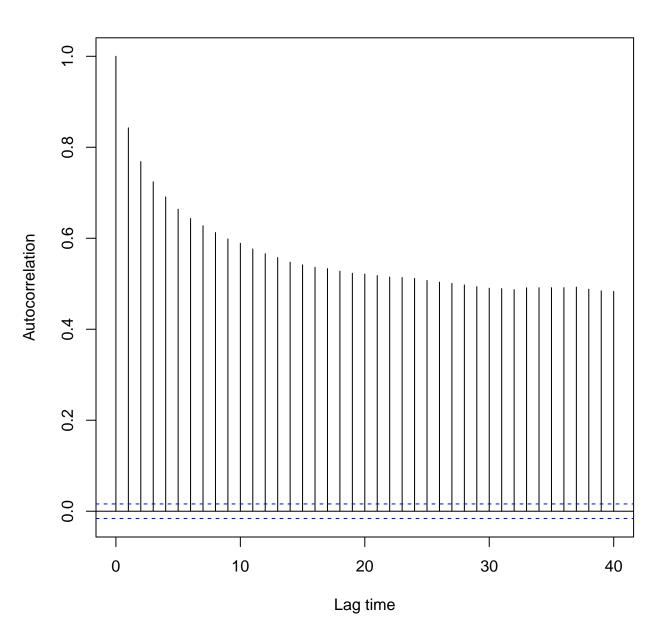
# **Mutation D GAC Mixture: 1**



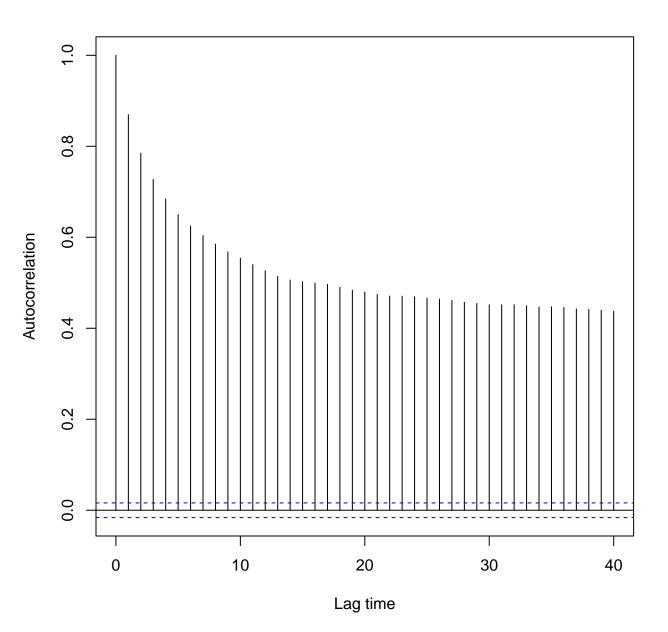
# **Mutation D GAC Mixture: 2**



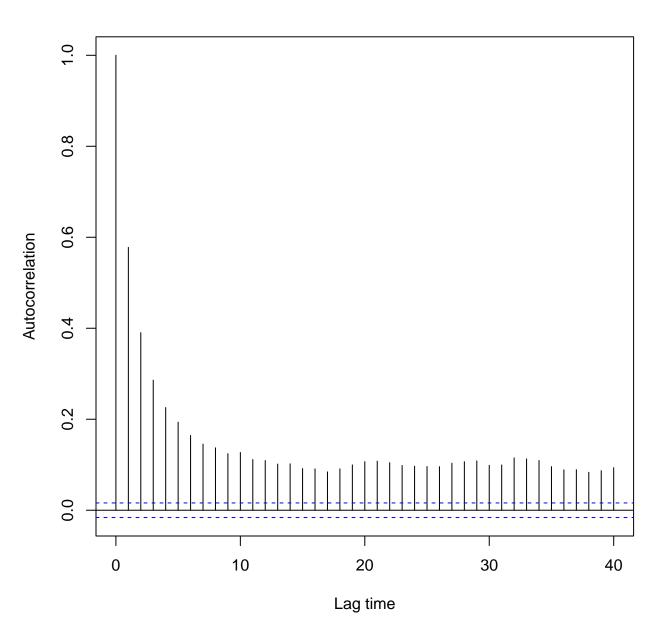
# **Mutation E GAA Mixture: 1**



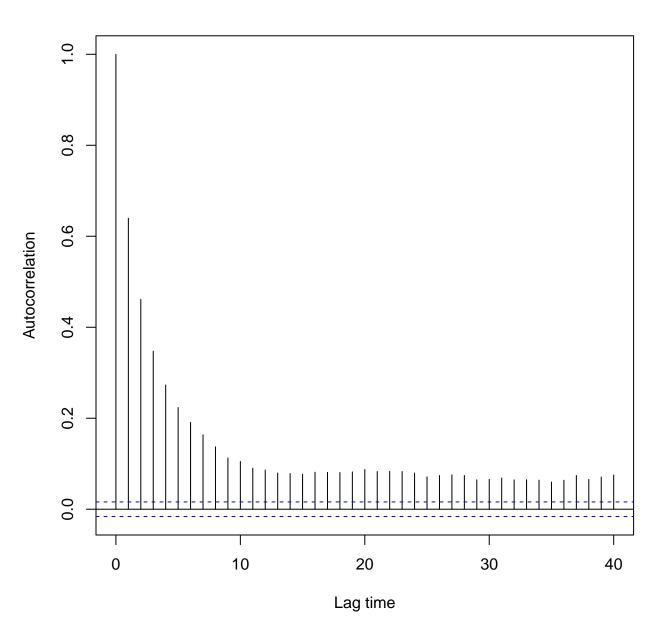
### **Mutation E GAA Mixture: 2**



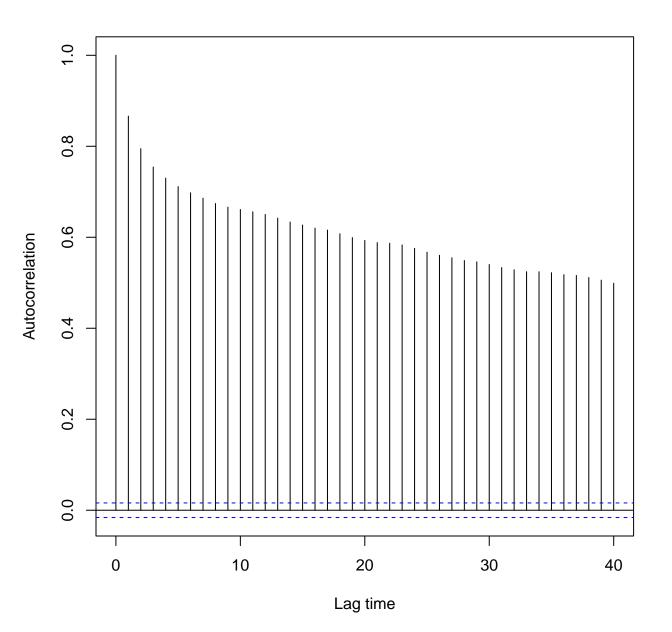
# **Mutation F TTC Mixture: 1**



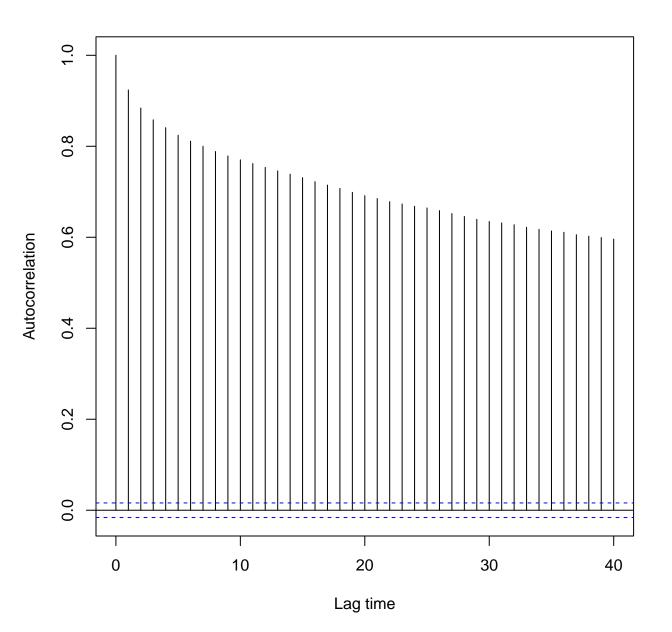
# **Mutation F TTC Mixture: 2**



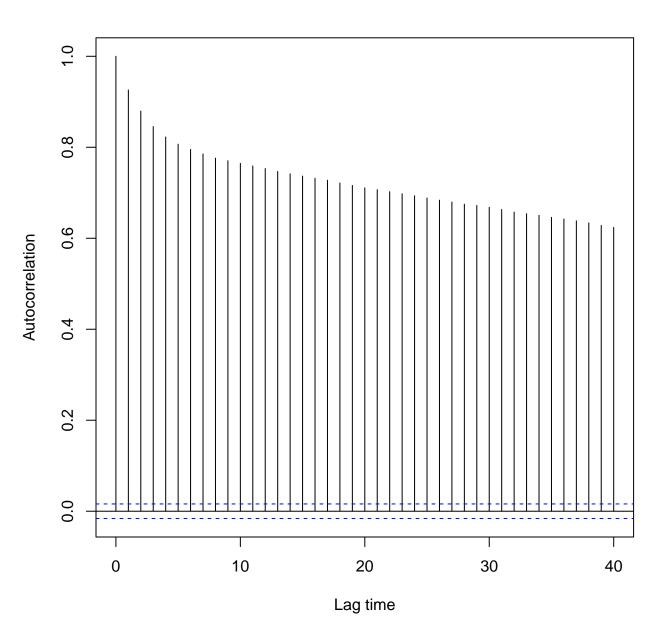
### **Mutation G GGA Mixture: 1**



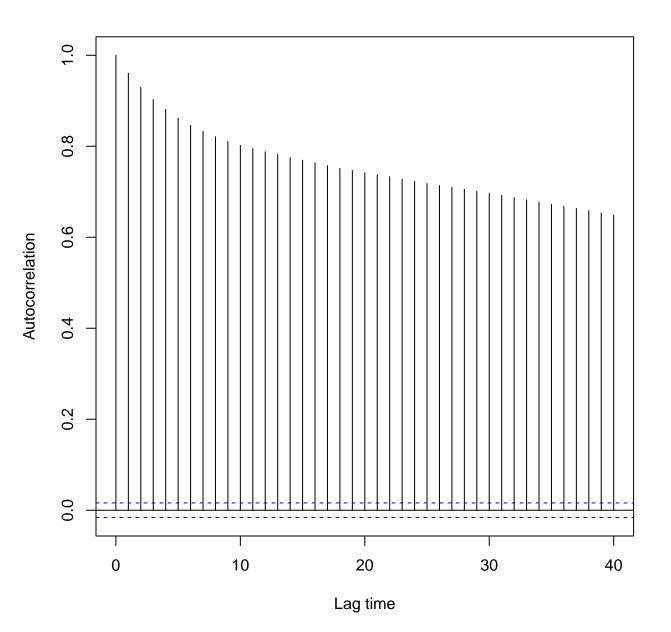
# **Mutation G GGA Mixture: 2**



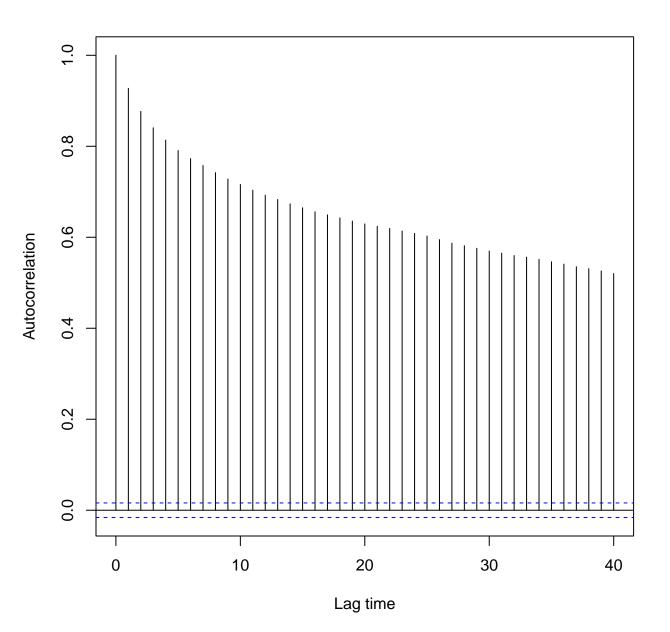
# **Mutation G GGC Mixture: 1**



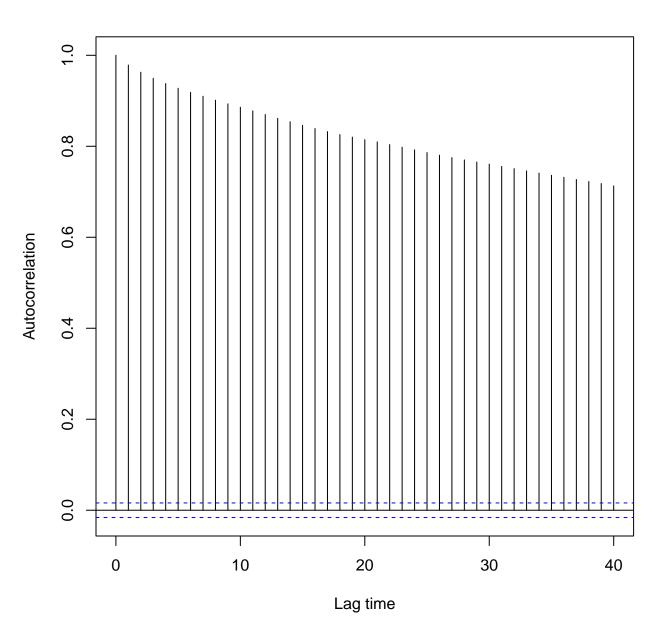
# **Mutation G GGC Mixture: 2**



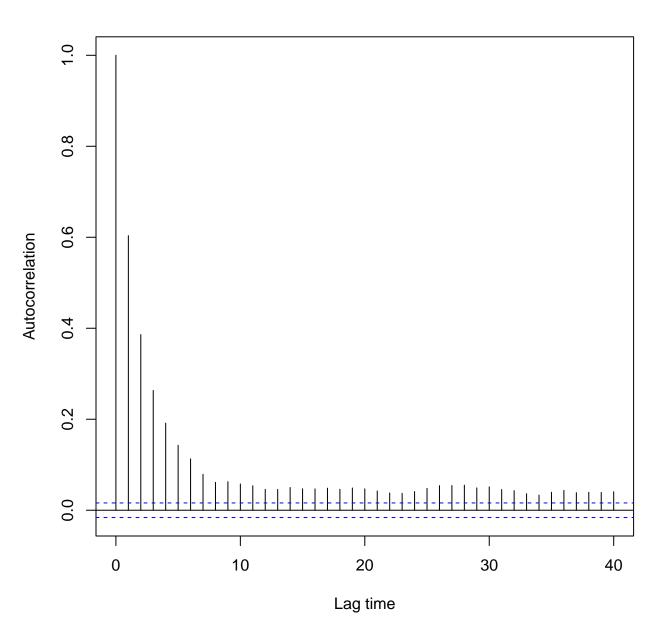
# **Mutation G GGG Mixture: 1**



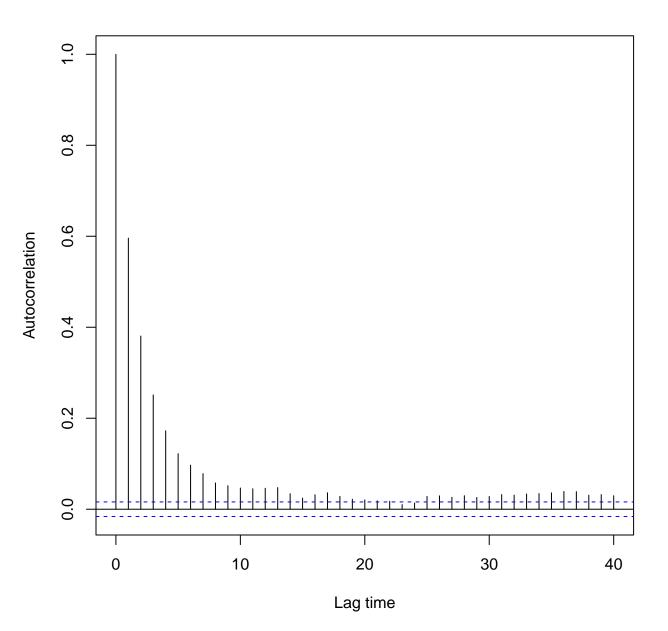
# **Mutation G GGG Mixture: 2**



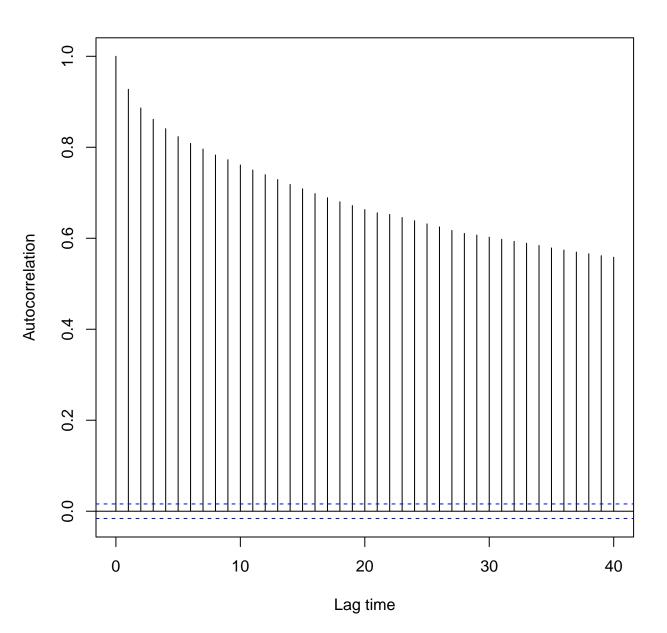
# **Mutation H CAC Mixture: 1**



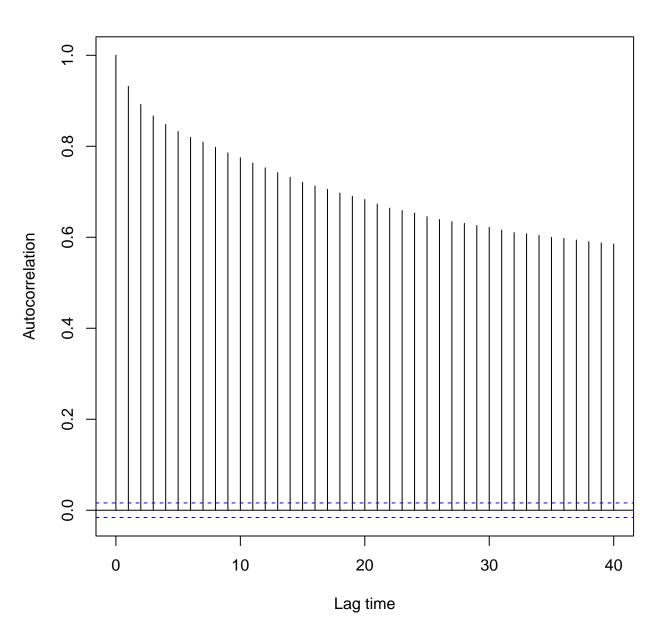
# **Mutation H CAC Mixture: 2**



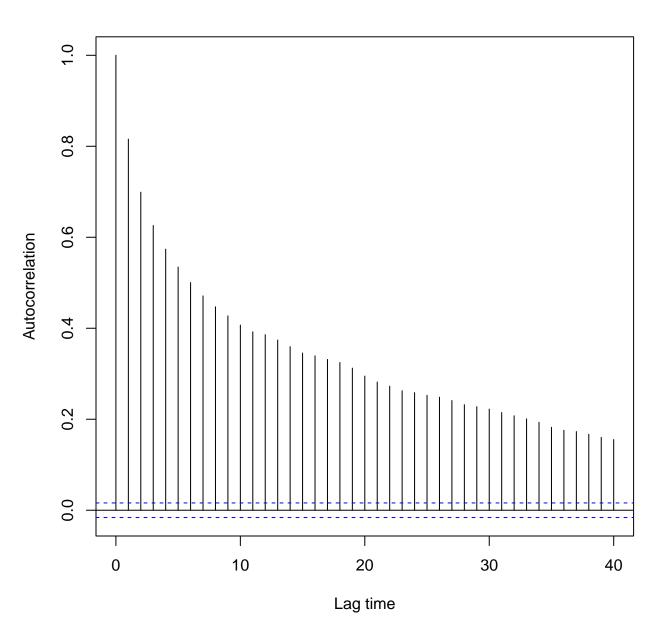
### **Mutation I ATA Mixture: 1**



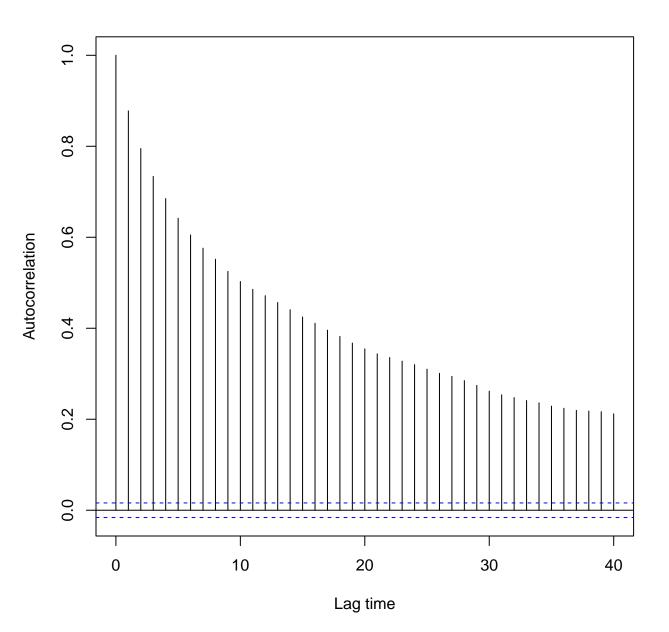
### **Mutation I ATA Mixture: 2**



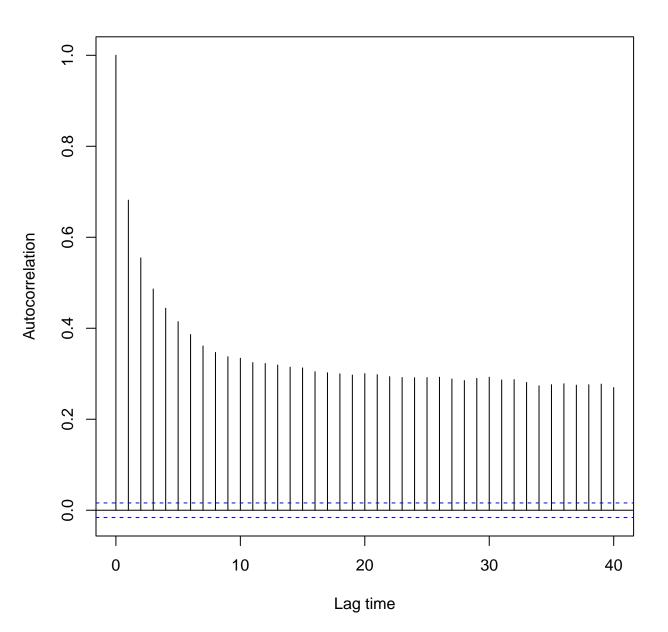
# **Mutation I ATC Mixture: 1**



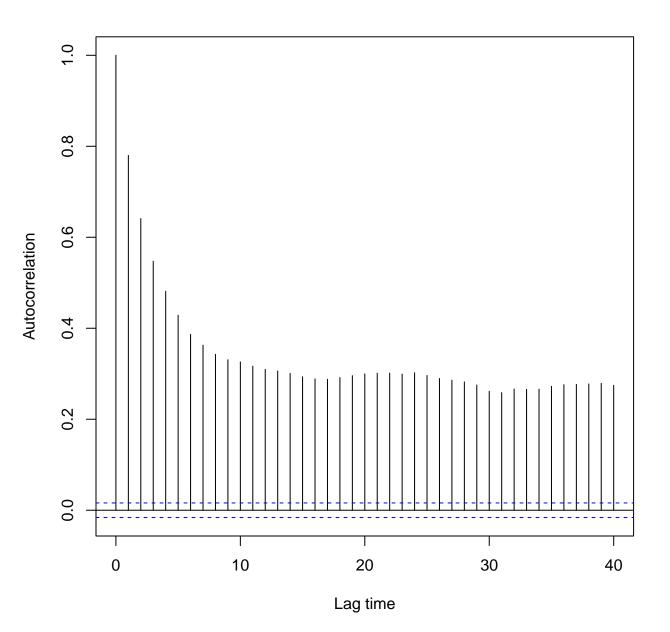
# **Mutation I ATC Mixture: 2**



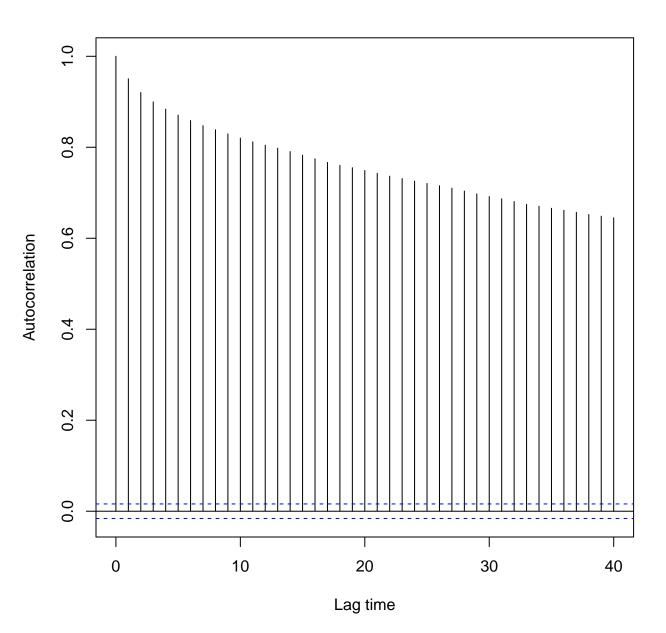
#### **Mutation K AAA Mixture: 1**



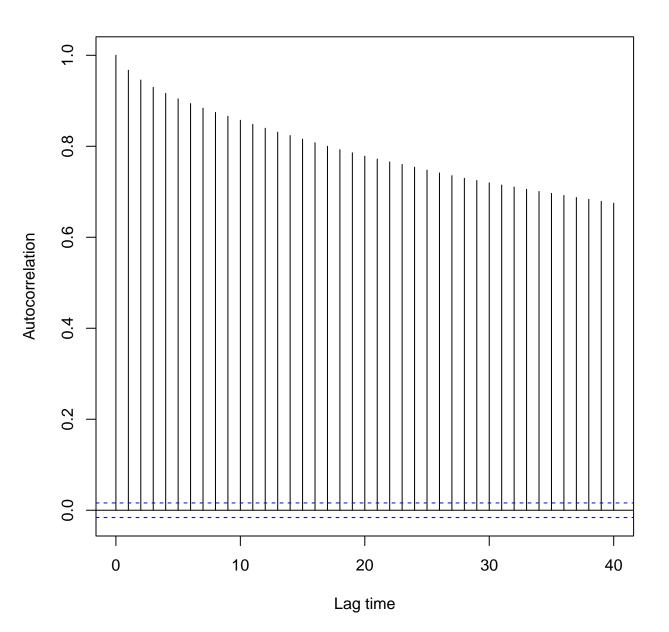
#### **Mutation K AAA Mixture: 2**



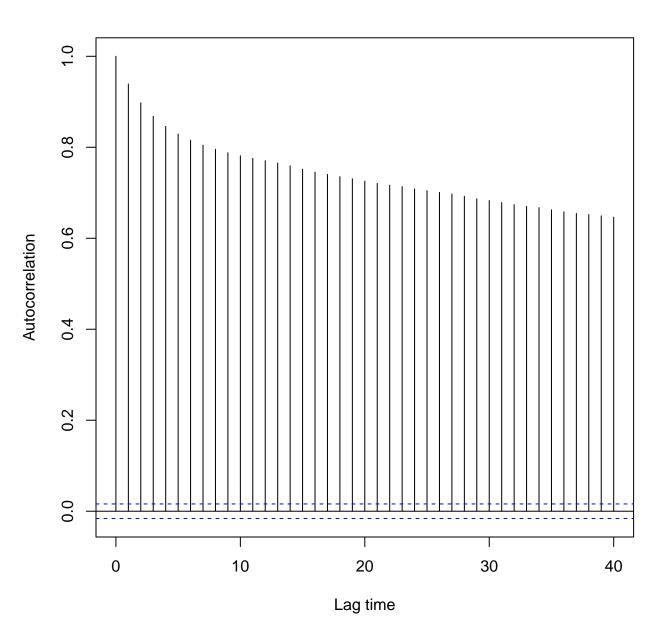
## **Mutation L CTA Mixture: 1**



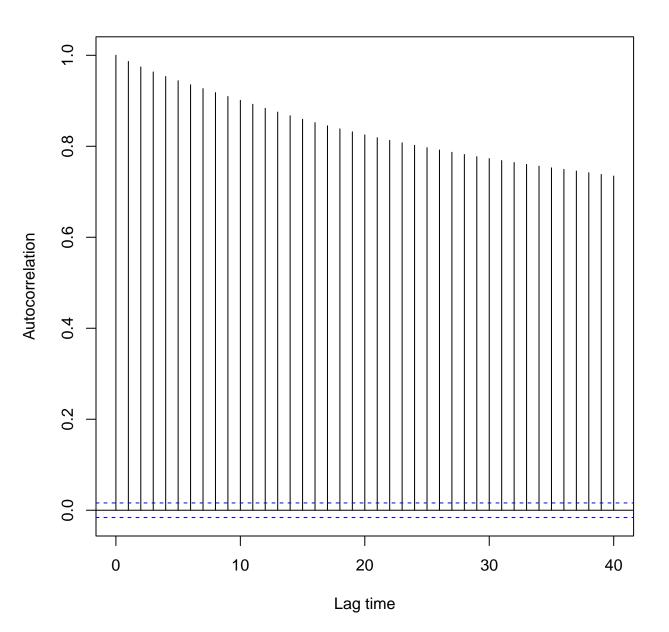
#### **Mutation L CTA Mixture: 2**



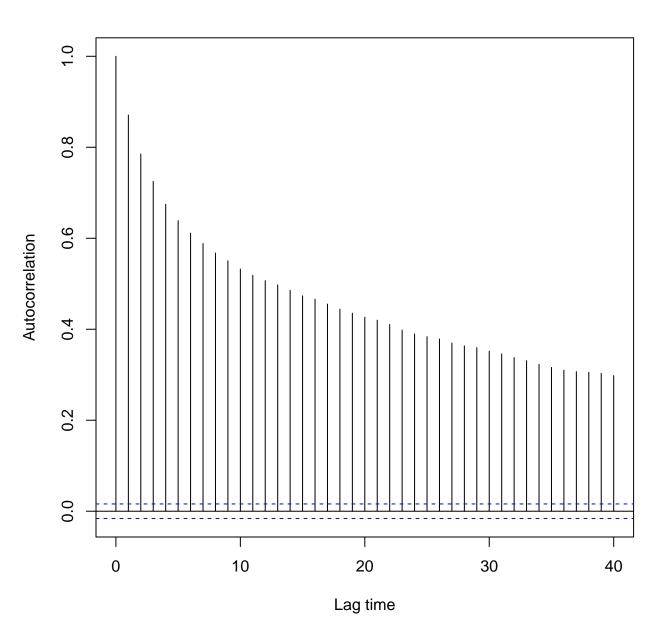
## **Mutation L CTC Mixture: 1**



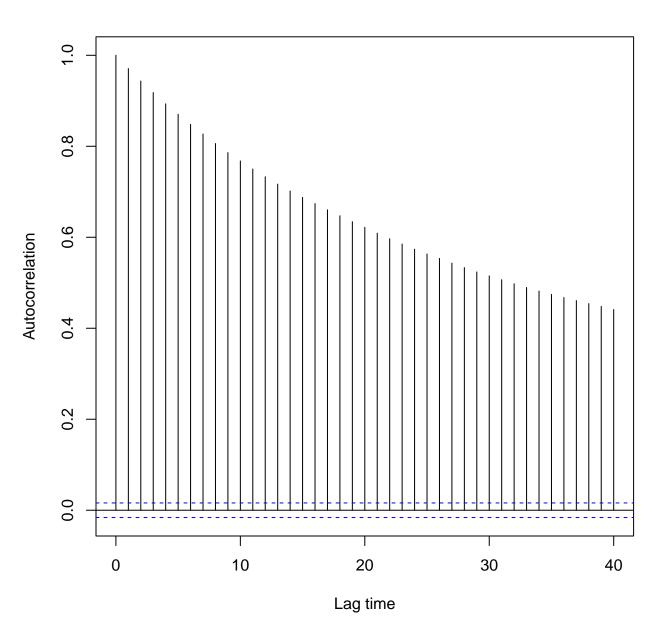
#### **Mutation L CTC Mixture: 2**



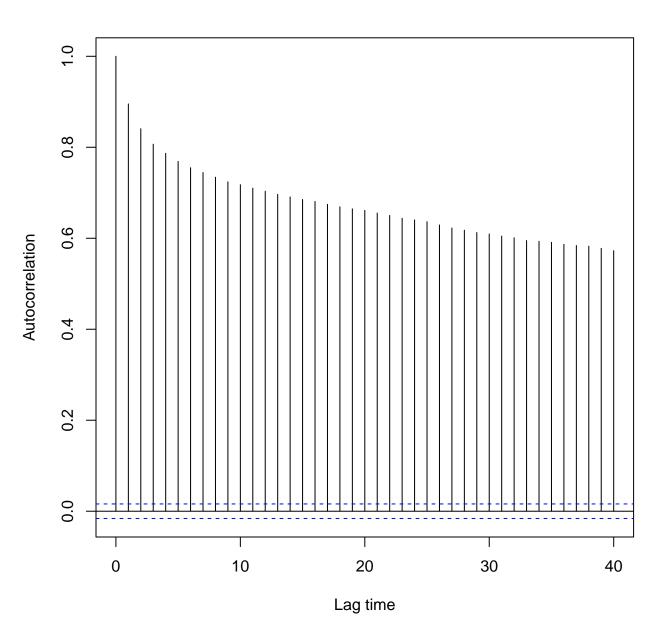
## **Mutation L CTT Mixture: 1**



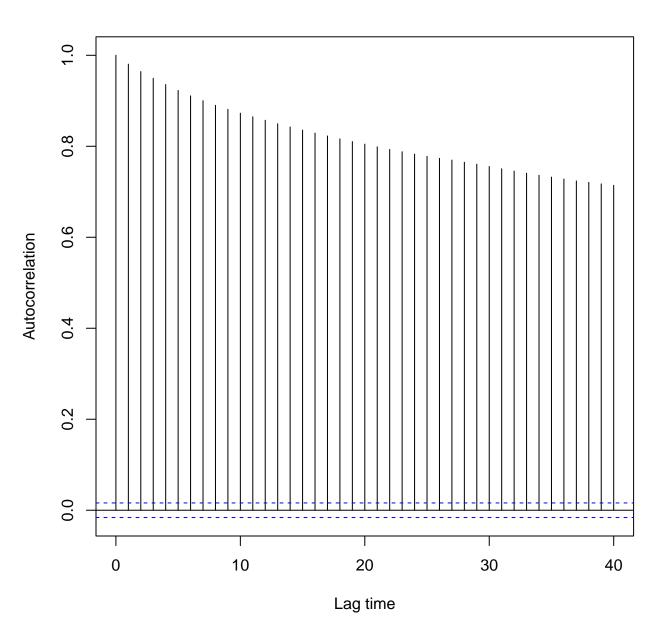
# **Mutation L CTT Mixture: 2**



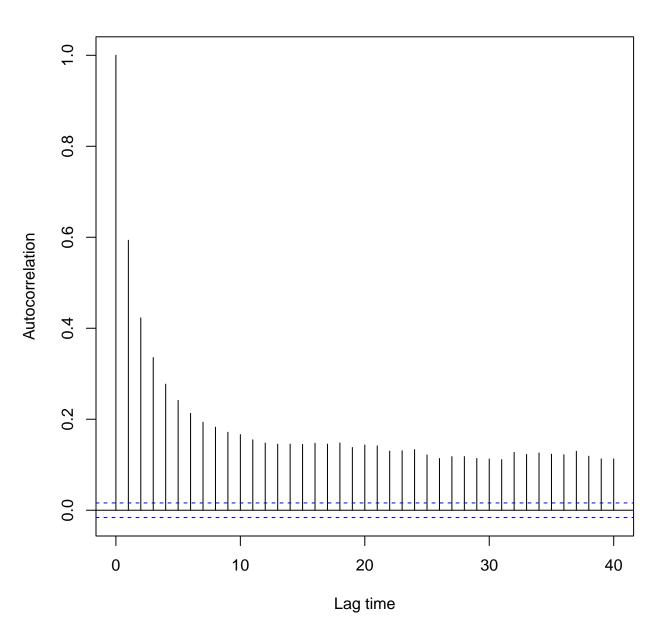
## **Mutation L TTA Mixture: 1**



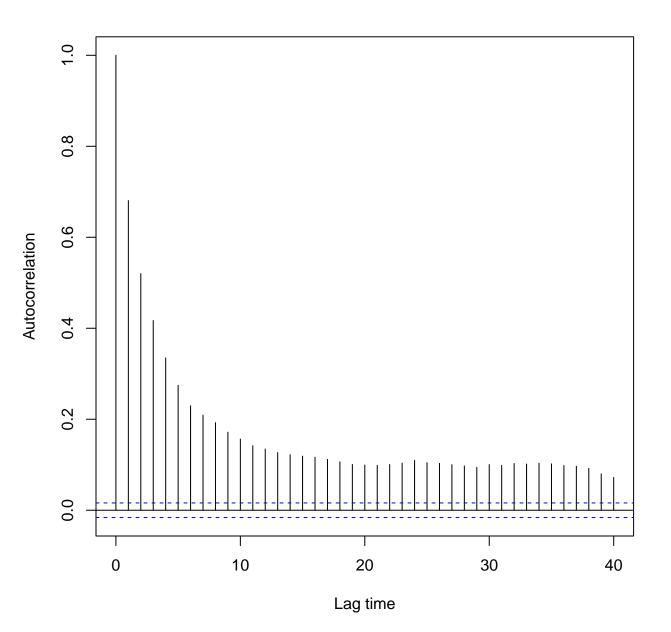
## **Mutation L TTA Mixture: 2**



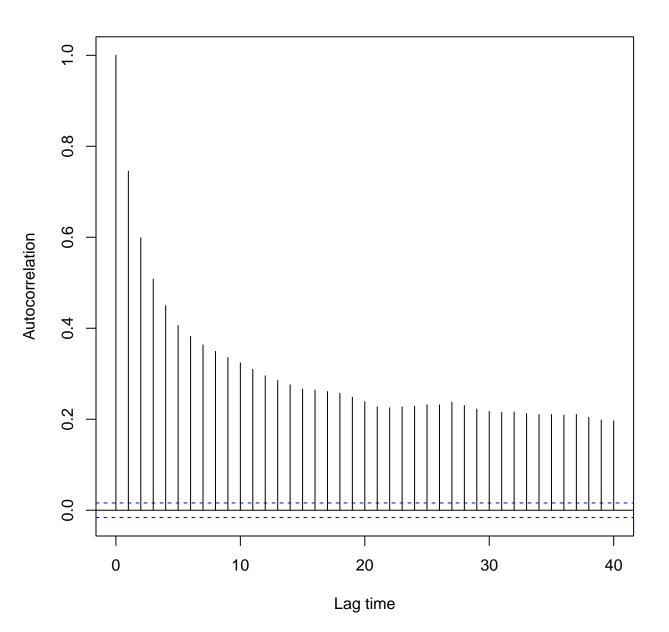
### **Mutation N AAC Mixture: 1**



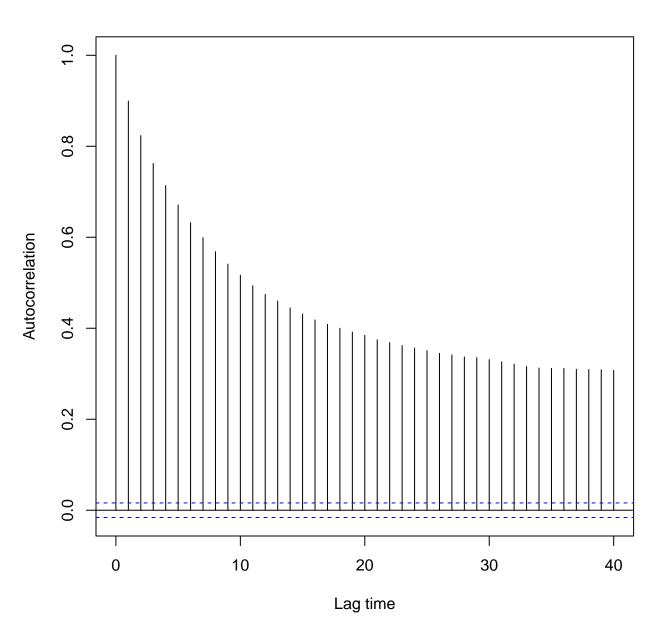
#### **Mutation N AAC Mixture: 2**



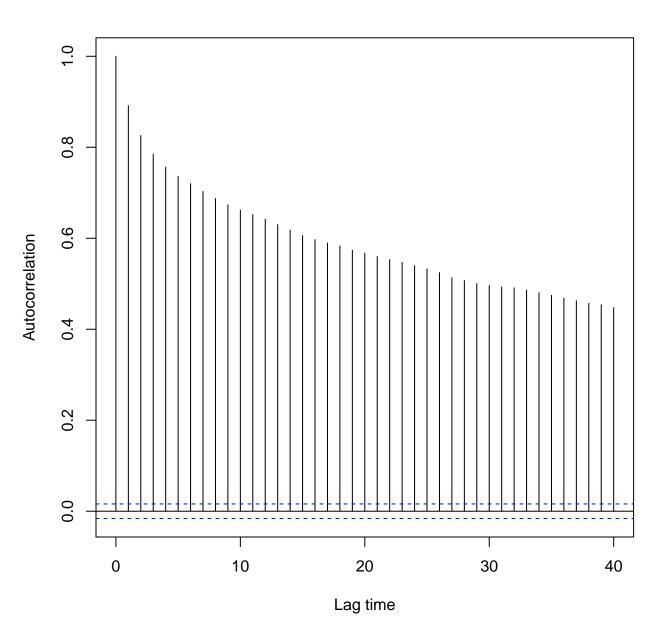
## **Mutation P CCA Mixture: 1**



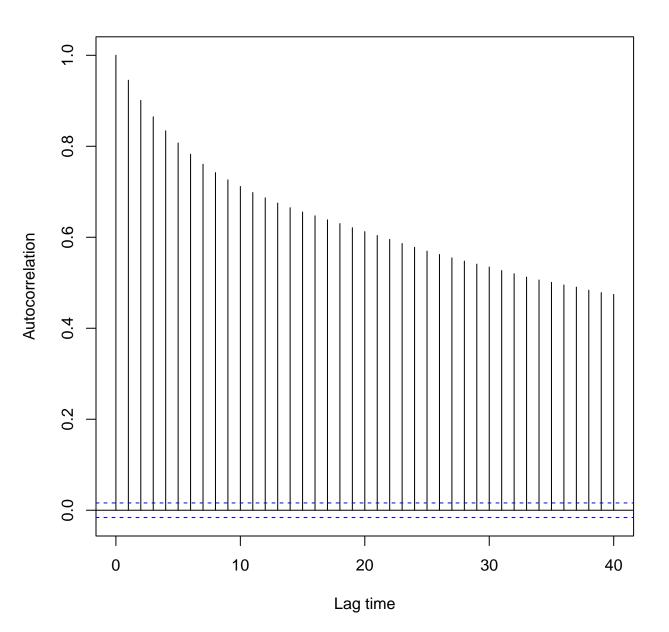
## **Mutation P CCA Mixture: 2**



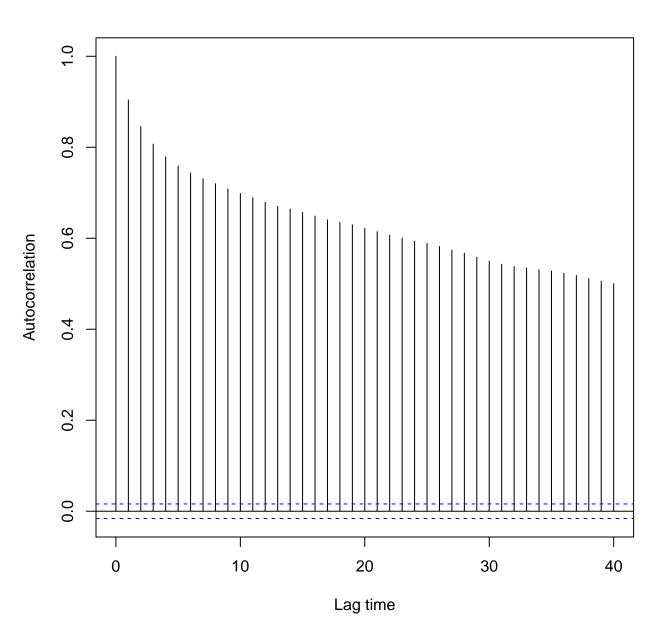
## **Mutation P CCC Mixture: 1**



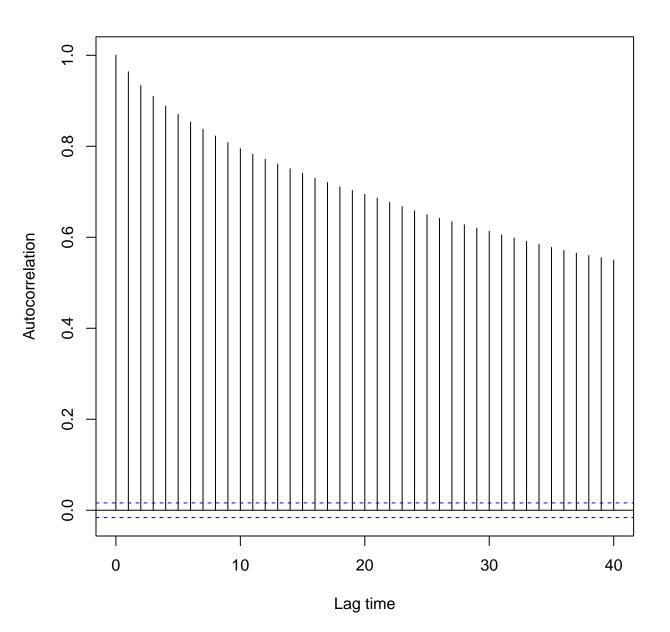
## **Mutation P CCC Mixture: 2**



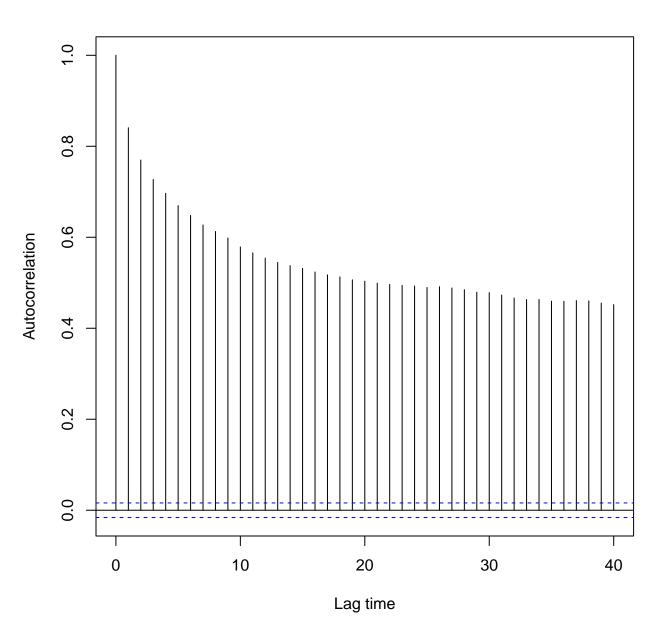
### **Mutation P CCG Mixture: 1**



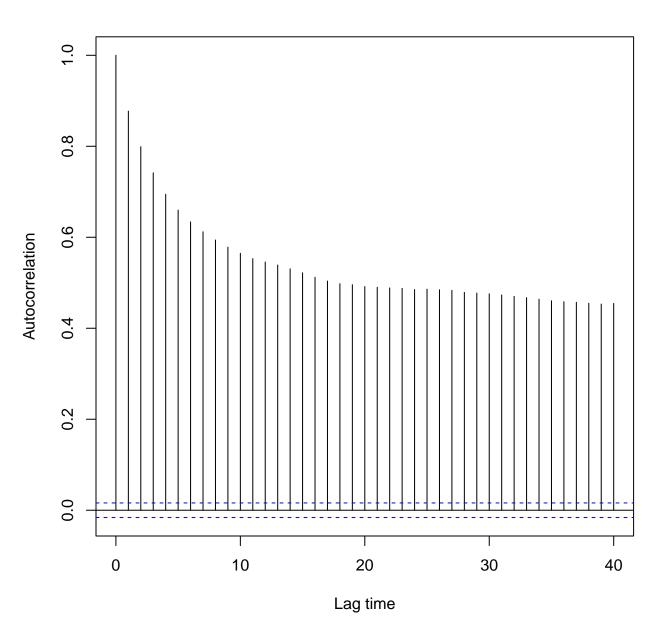
### **Mutation P CCG Mixture: 2**



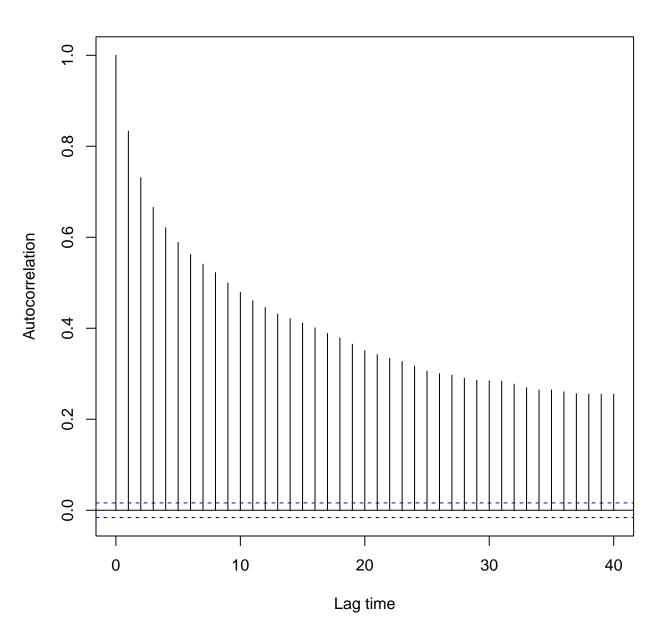
### **Mutation Q CAA Mixture: 1**



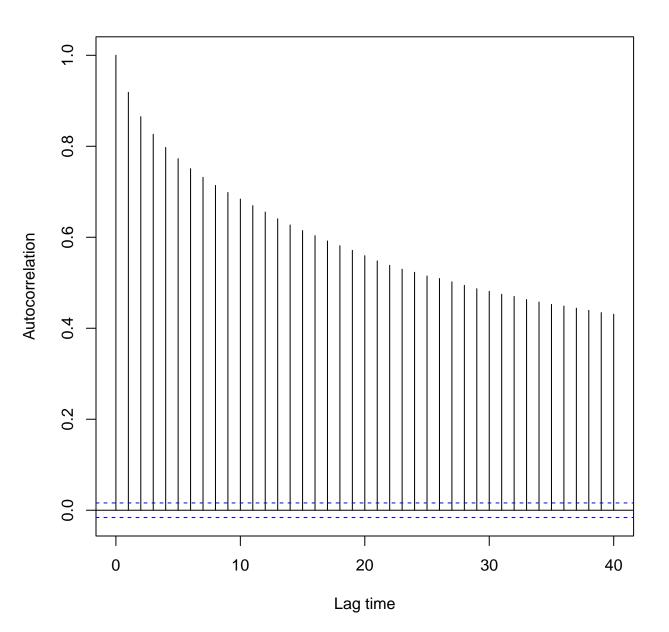
### **Mutation Q CAA Mixture: 2**



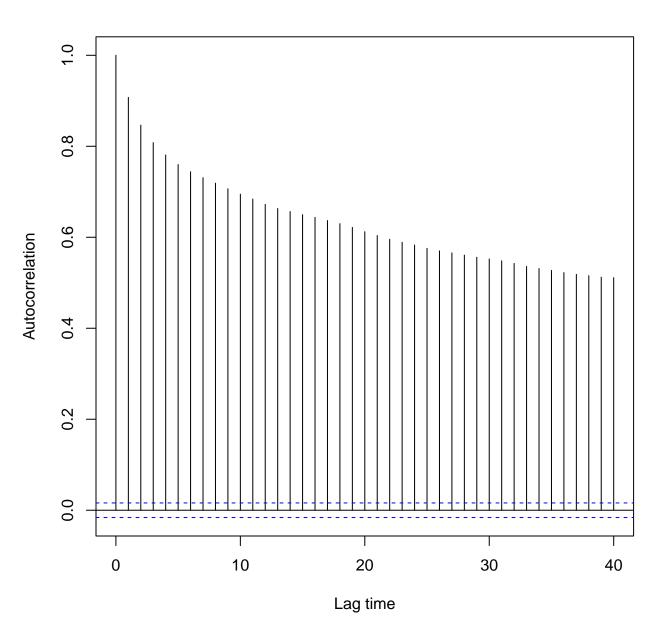
### **Mutation R AGA Mixture: 1**



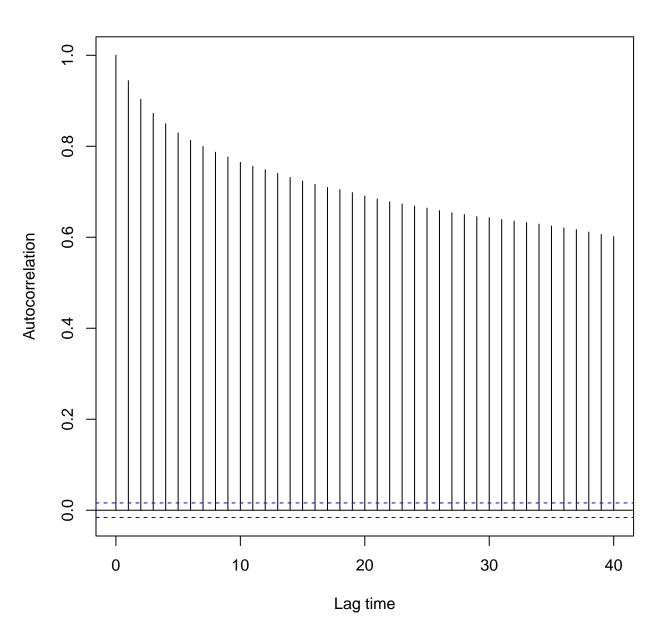
#### **Mutation R AGA Mixture: 2**



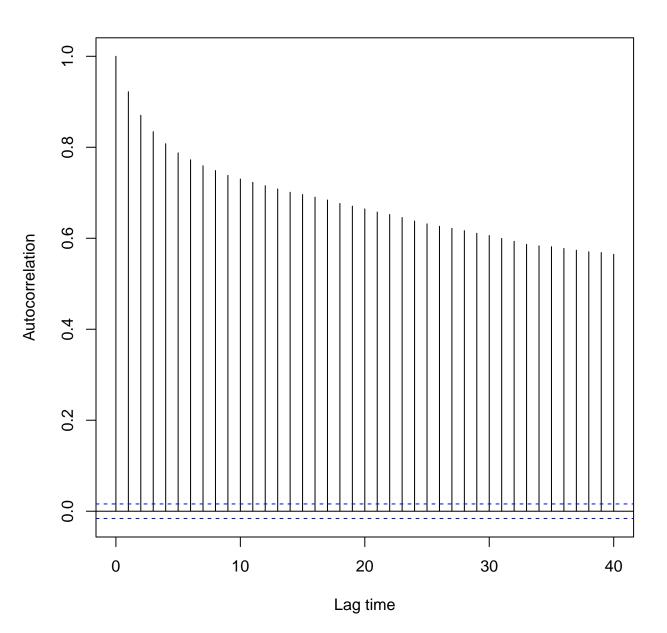
#### **Mutation R AGG Mixture: 1**



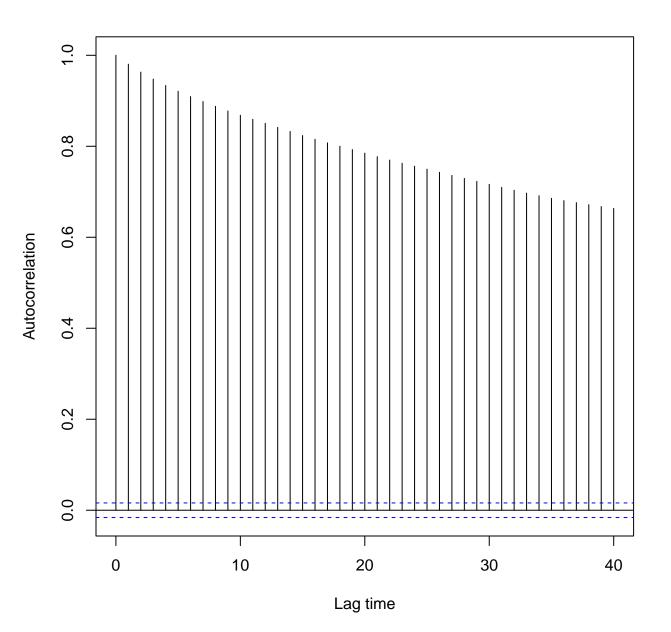
### **Mutation R AGG Mixture: 2**



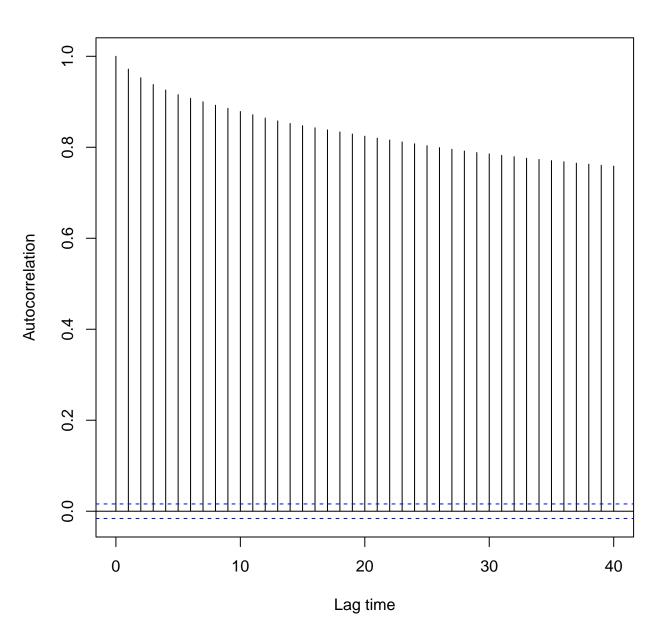
### **Mutation R CGA Mixture: 1**



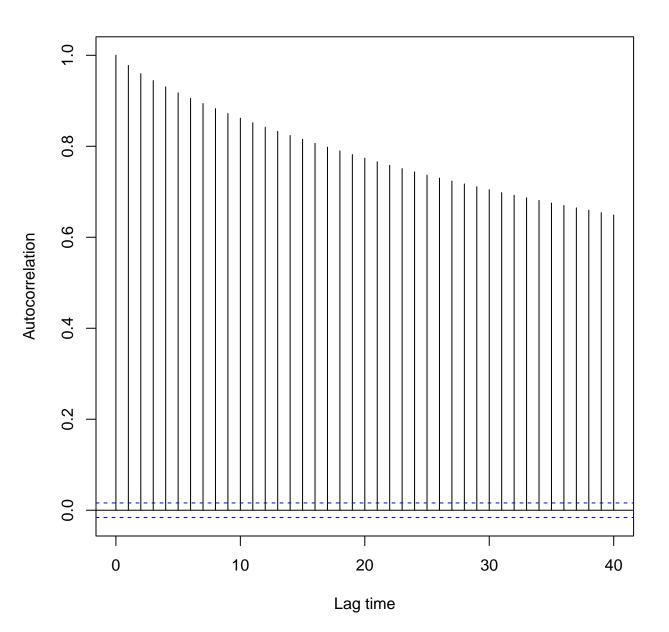
### **Mutation R CGA Mixture: 2**



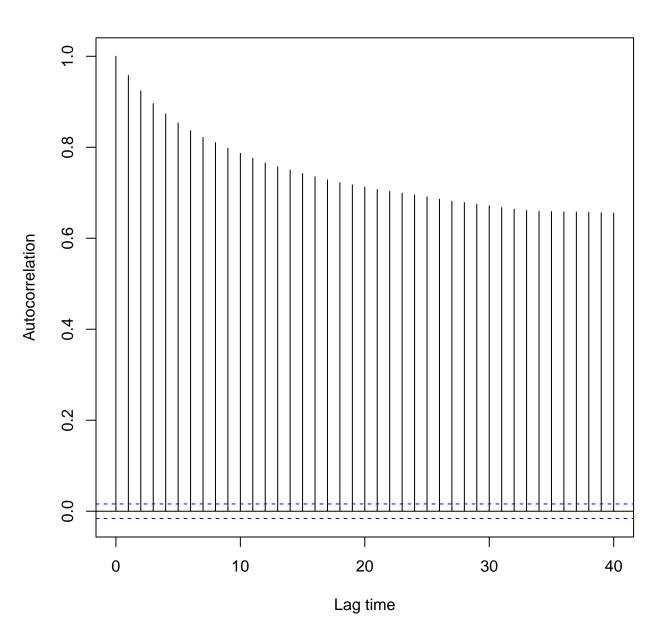
## **Mutation R CGC Mixture: 1**



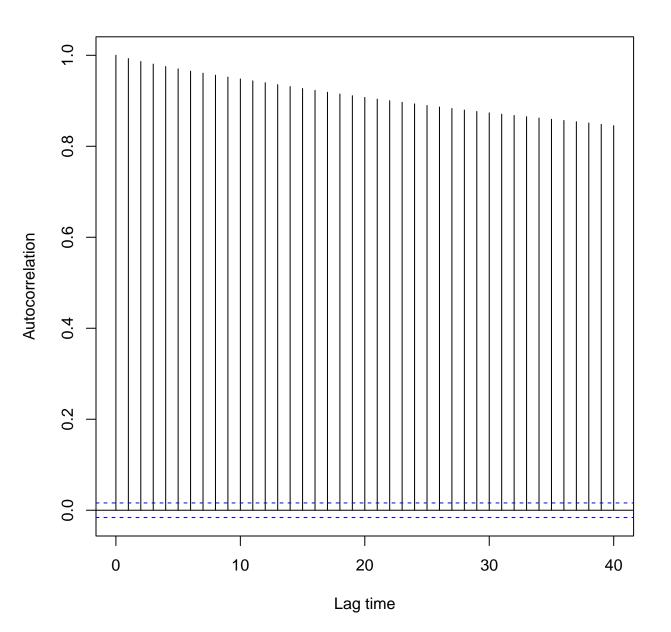
### **Mutation R CGC Mixture: 2**



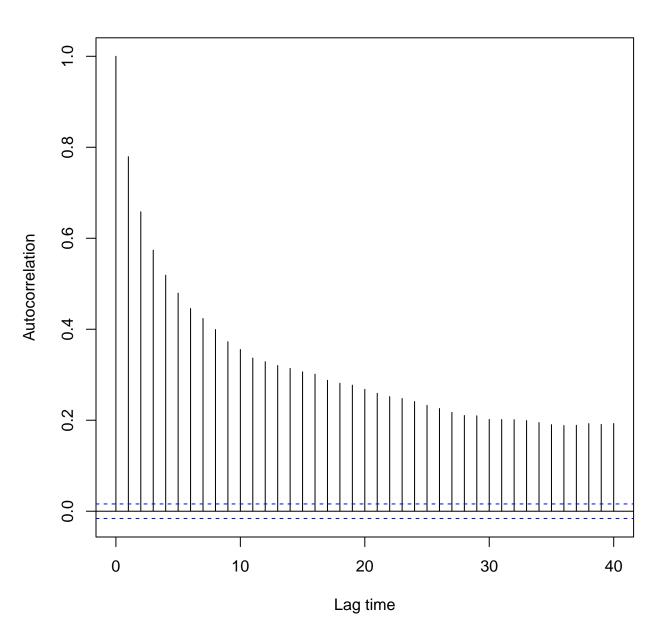
#### **Mutation R CGG Mixture: 1**



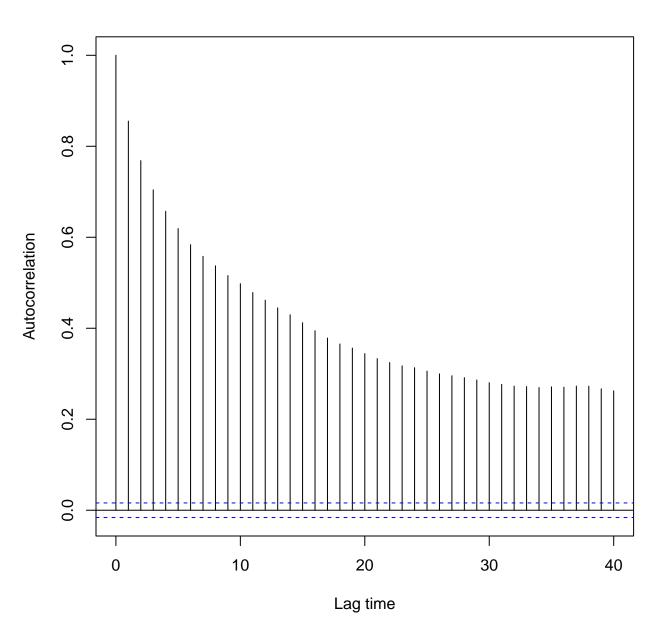
### **Mutation R CGG Mixture: 2**



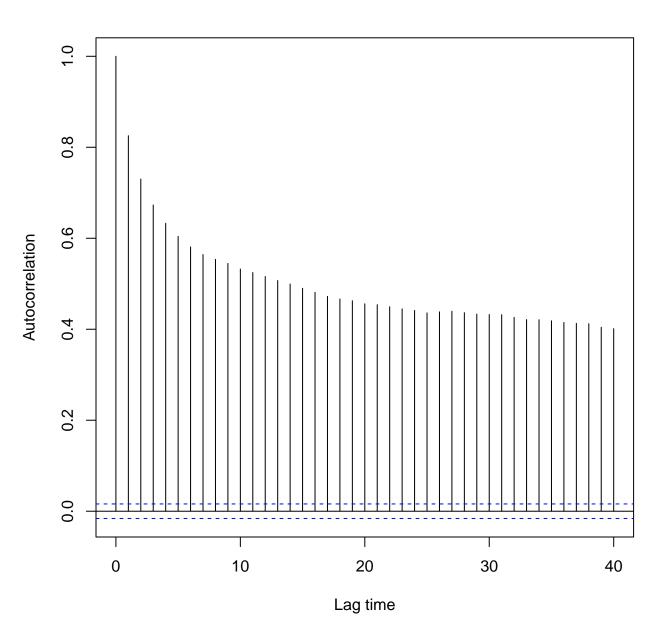
## **Mutation S TCA Mixture: 1**



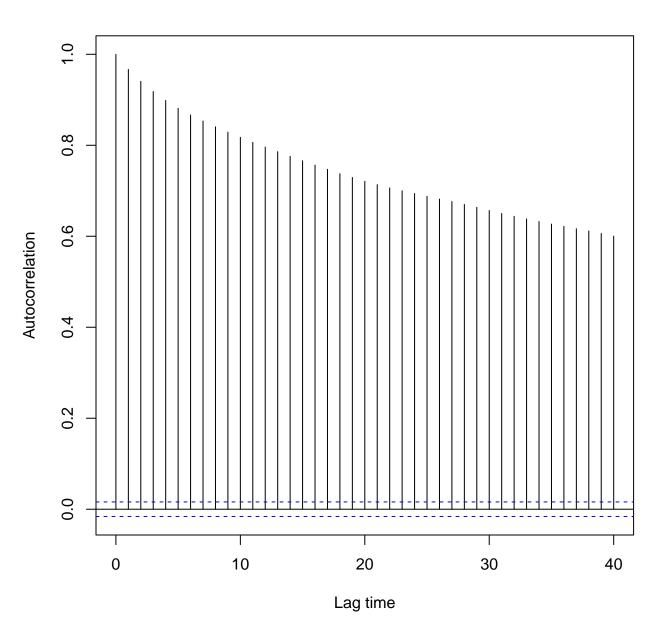
### **Mutation S TCA Mixture: 2**



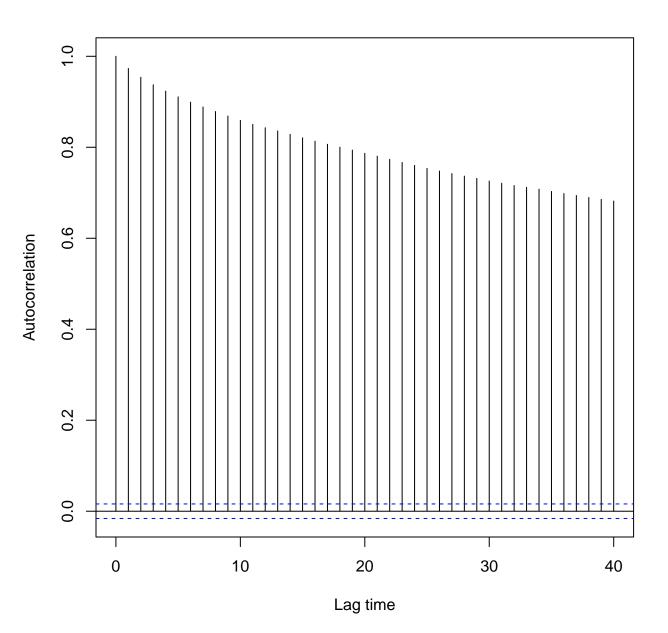
## **Mutation S TCC Mixture: 1**



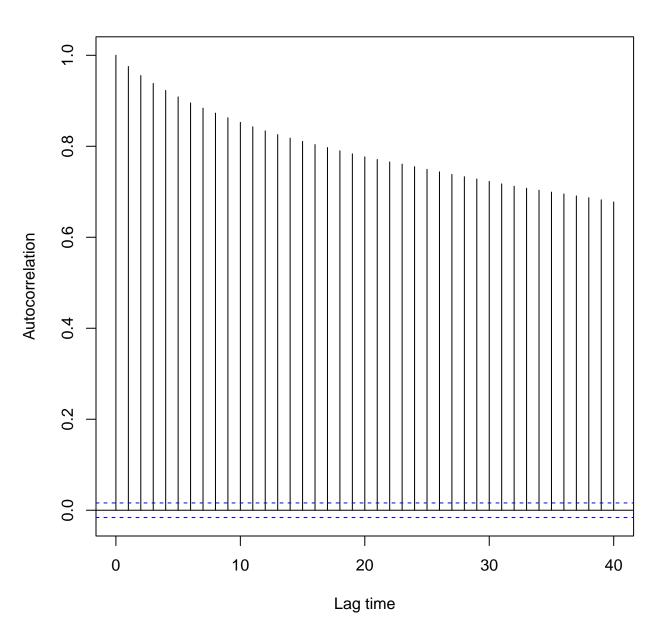
## **Mutation S TCC Mixture: 2**



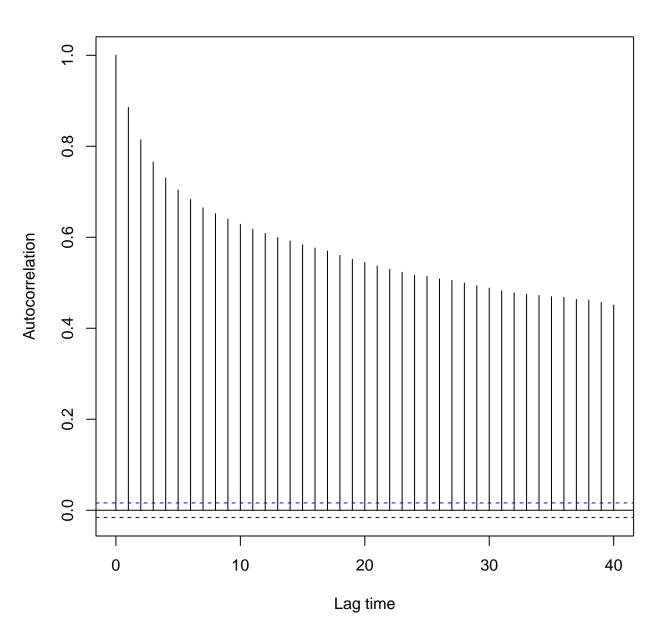
### **Mutation S TCG Mixture: 1**



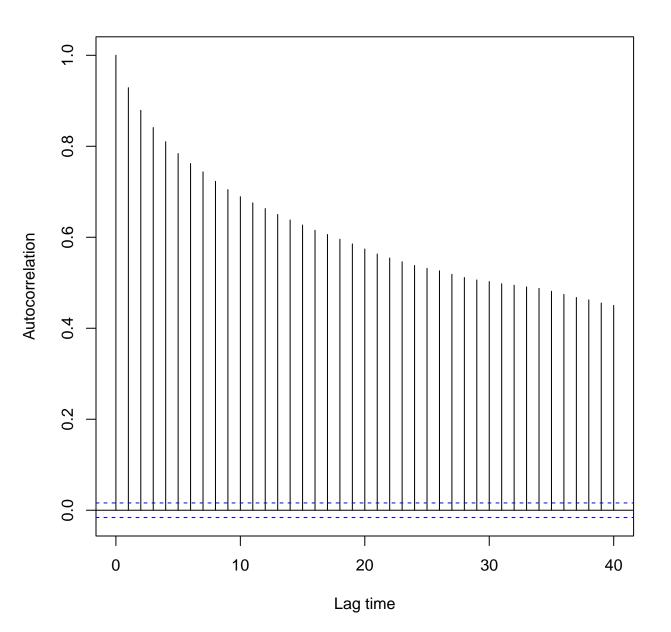
### **Mutation S TCG Mixture: 2**



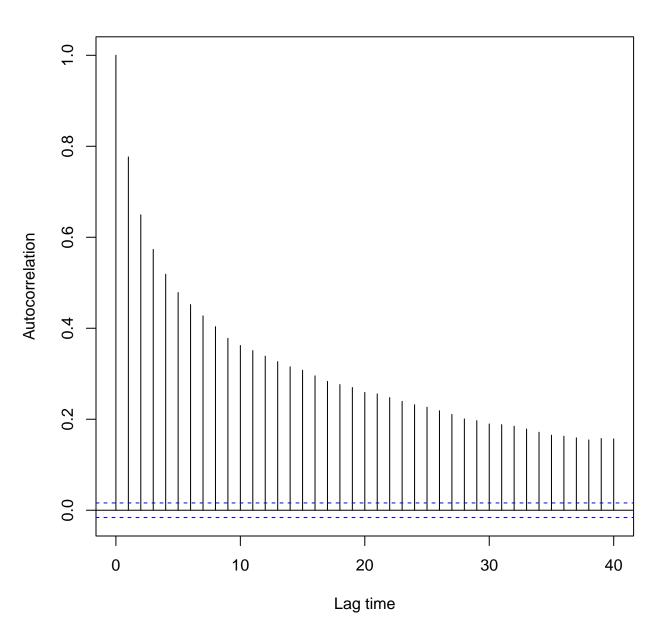
### **Mutation T ACA Mixture: 1**



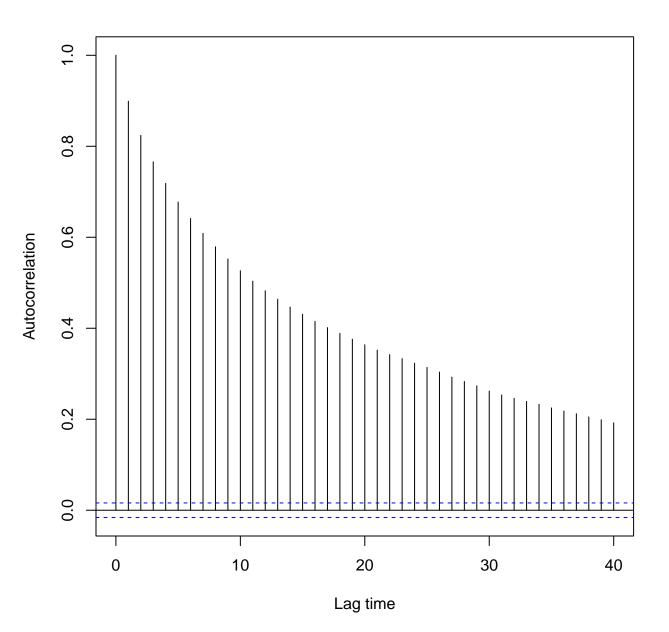
### **Mutation T ACA Mixture: 2**



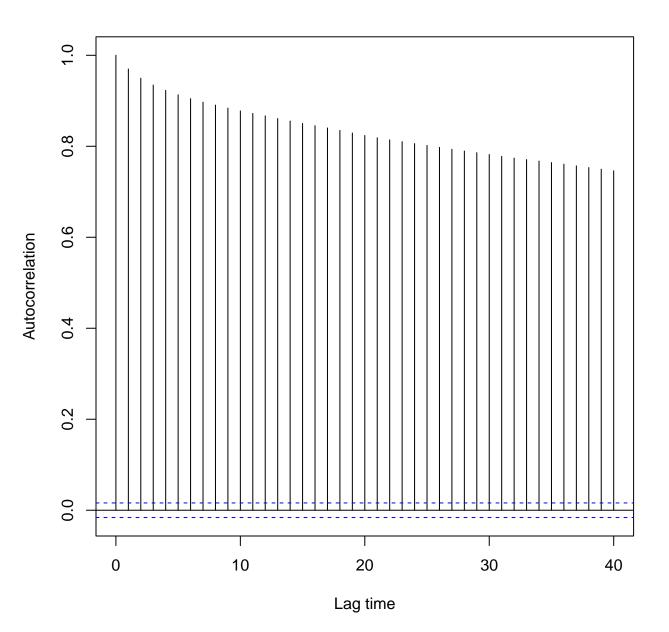
# **Mutation T ACC Mixture: 1**



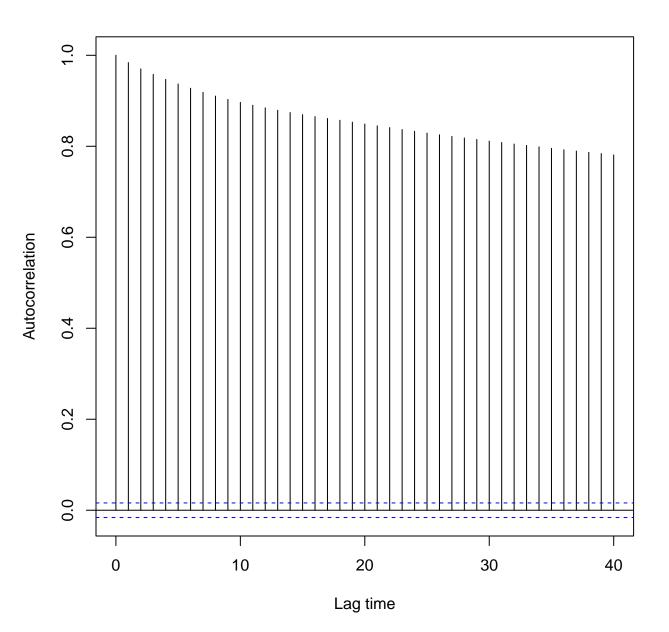
# **Mutation T ACC Mixture: 2**



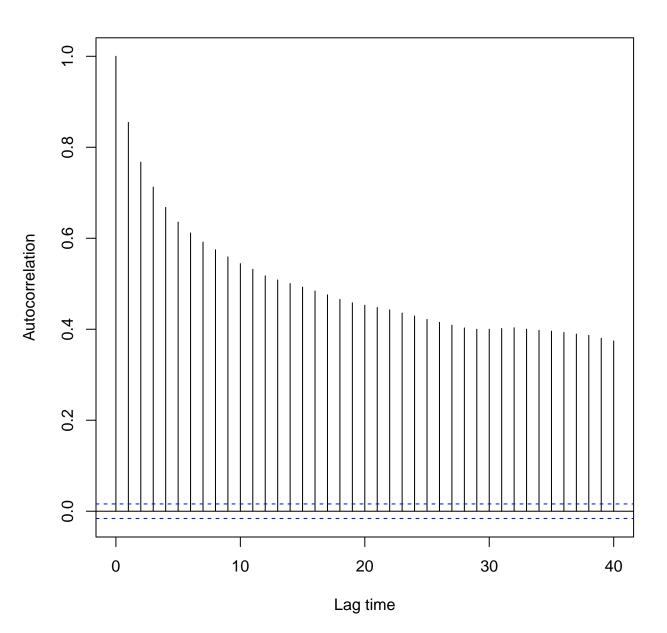
## **Mutation T ACG Mixture: 1**



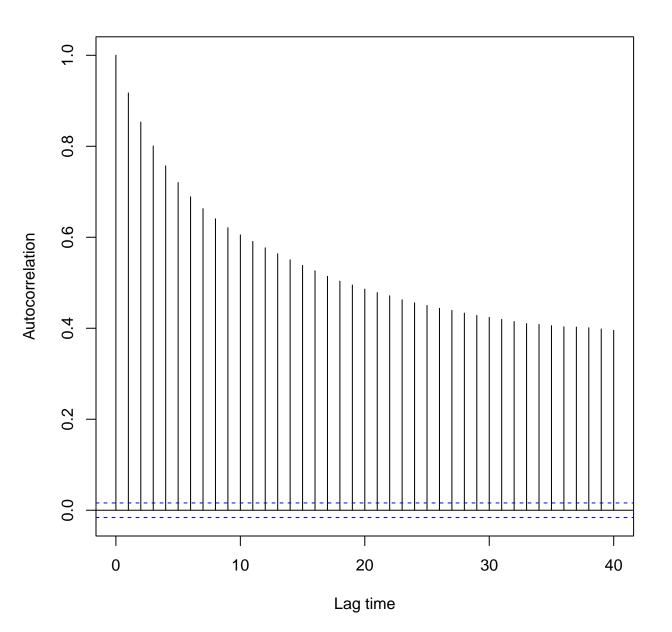
## **Mutation T ACG Mixture: 2**



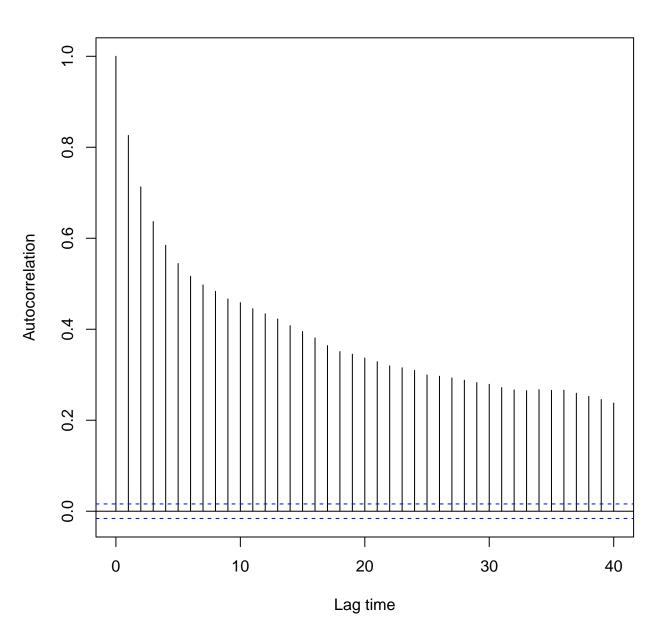
### **Mutation V GTA Mixture: 1**



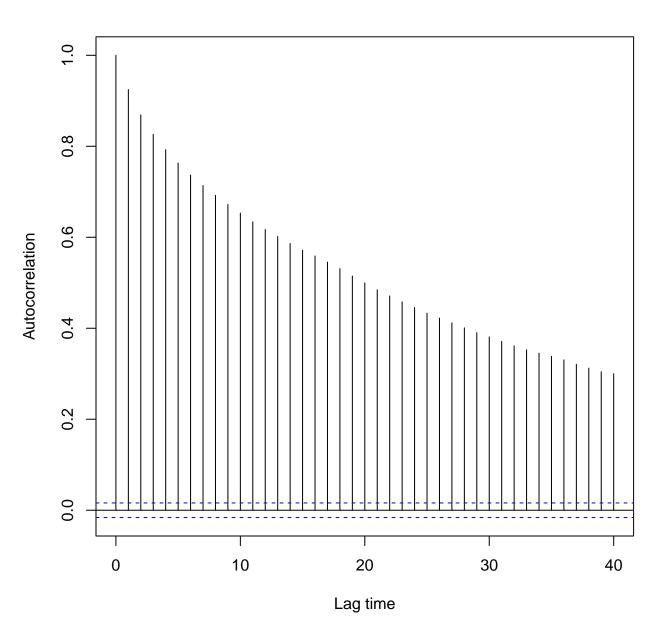
### **Mutation V GTA Mixture: 2**



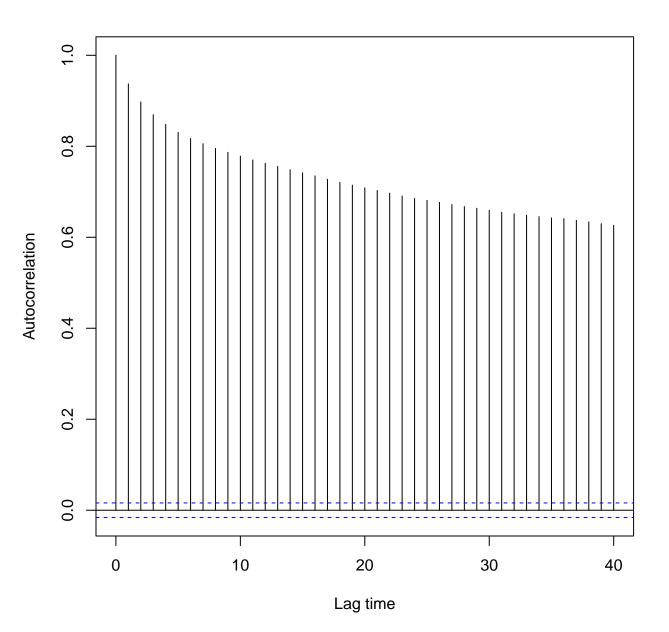
## **Mutation V GTC Mixture: 1**



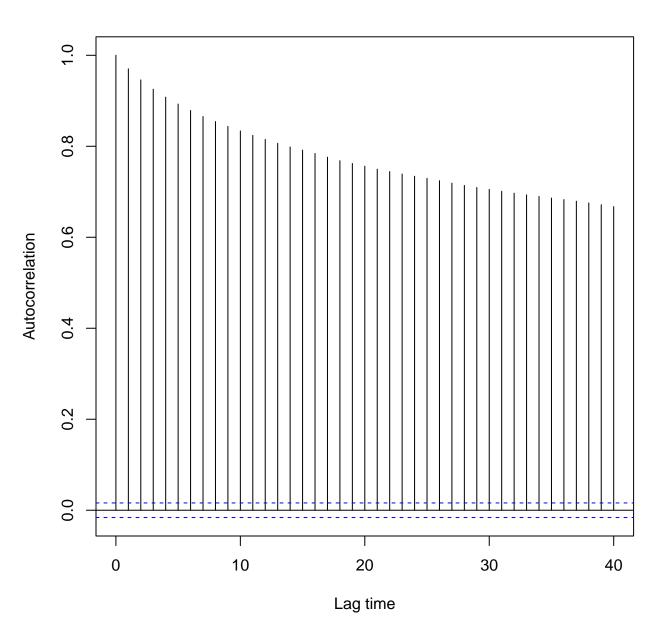
## **Mutation V GTC Mixture: 2**



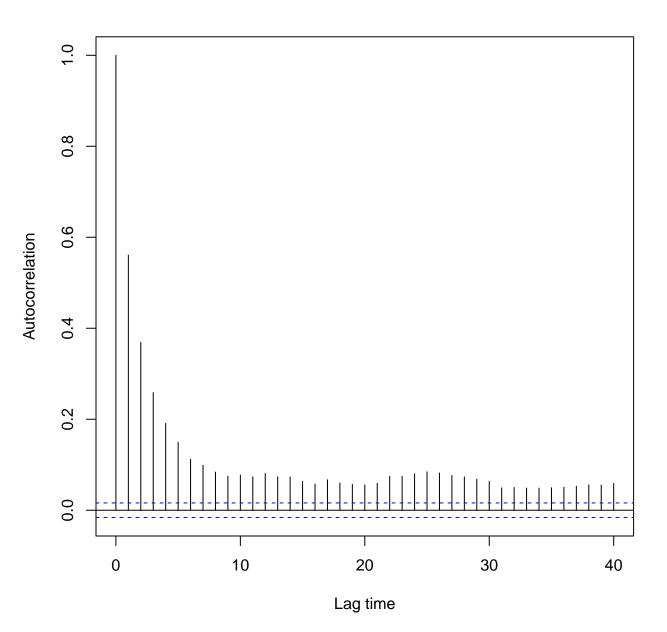
### **Mutation V GTG Mixture: 1**



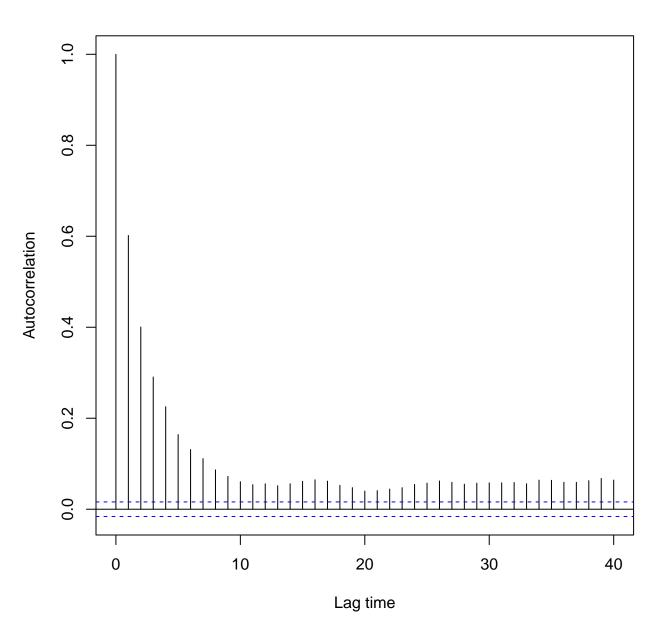
## **Mutation V GTG Mixture: 2**



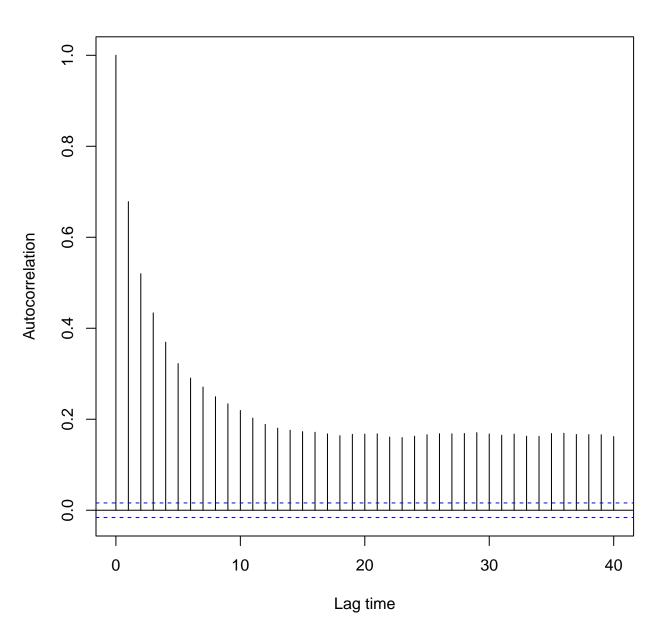
# **Mutation Y TAC Mixture: 1**



## **Mutation Y TAC Mixture: 2**



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



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

